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CLINICAL LECTURES AND REMARKS

DELIVERED IN 1836, ON

DISEASES OF THE SKIN, VENEREAL DISEASES, AND SURGICAL CASES,

AT THE

SKIN INFIRMARY,

AND AT THE

JERVIS-STREET HOSPITAL, DUBLIN,

BY

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EXANTHEMATOUS GROUP OF VENEREAL DISEASES.

Preliminary Remarks on the Pathology of Venereal Diseases of the Skin, continued from THE LANCET *of April 23.*

GENTLEMEN: In my last lecture on syphilis, I demonstrated to you three important points:—

1st. The distinct existence of a peculiar group of venereal diseases, to which I gave the name of *Exanthematous Syphilitic Eruptions.*

2nd. That the matter secreted by the morbid surfaces in these eruptions was infectious; and,

3rd. That the form of disease which this matter produced, always presented the same general characters.

I also remarked, that the facts which I had observed, and which I then partly unfolded to you, had led me at one period to the belief, that this group of venereal diseases was produced by a morbid or morbific poison, *originally* distinct from that which produces the other forms of syphilitic eruption, but that subsequent experience and further investigation demonstrated that a different view of the subject must be taken.

I shall now proceed to lay before you an outline of the facts connected with this part of my investigations, and in doing so I shall follow the plan pursued in the last lecture, that is, I shall endeavour to make you traverse in a rapid manner the field of inquiry through which I was compelled tardily to move along, because I am certain it is the plan best adapted to convince you that my conclusions are founded in nature, or that they are simply the natural consequences of the phenomena observed.

Of the chain of facts which I propose now to lay before you, the first link is obtained from a consideration of the

Venereal Disease in Infants.

An infant may contract the venereal disease from the mother in two ways,—when in utero, and while passing through the outlets in parturition. Of the form of venereal disease caught in the latter manner, I do not at present intend to speak. The remarks which I am about to make relate only to the former. Do you know that Mr. HUNTER denied that the fœtus could contract the venereal disease while in utero? He absolutely did deny this fact, which is now so generally known, and so universally admitted. How did this happen? Was it that Mr. HUNTER had never seen such cases? No, Mr. HUNTER had seen many such cases, and you will find several of them detailed in his work on the venereal disease; but Mr. HUNTER'S speculative views respecting syphilis caused him not only to doubt, but to deny, the impressions made on his own senses. He was well acquainted with the symptoms produced by the venereal disease in infants, but having formed certain speculative opinions of the phenomena and laws of syphilis, and observing that the symptoms of the venereal disease in infants did not tally with those opinions, he denied that such symptoms were owing to syphilis. He was unable, aye, the mind of Mr. HUNTER was unable to extricate itself from the thraldom in which it was involved by speculative conceptions. How careful should we therefore be, that our opinions be slowly formed, that our theories be confined to such inferences as *palpably* result from facts! In this way alone can we hope to escape the first step in the road to error, a step which, when once made, leads almost inevitably to a path from which we can scarcely ever retreat.

Infants who have contracted the venereal disease while in utero, may be arranged in two classes:—1st. Those born with symptoms of the disease; and, 2nd. Those which, though apparently free from it, become, sooner or later, the subjects of it, yet under such circumstances as to prevent all doubt of its having been contracted in utero. The cases referable to the former class are by far the least numerous. This I must explain. It is an extremely rare occurrence to find an infant at birth alive, and presenting symptoms of the venereal disease. Such occurrences do, however, now and then take place. Here are several drawings of such cases. This drawing represents the mildest form of case which occurs; the appearances are merely red brown stains on different parts of the body. In this second drawing, the stains are more strongly marked, and are raised so as to appear like flat tubercles; while in this, the cuticle has been separated in many parts by the interposition of a fluid, so that bullæ are formed. I repeat that it is very rare to find children born alive with symptoms of the venereal disease, and such as are so born very seldom live more than a few hours. But it is very common to observe still-born fœtuses, whose death is attributed to syphilis. These are not, for the most part, retained in utero the full time of utero-gestation. Their abortion, in general, occurs at some period between the sixth and eighth month. They are, however, sometimes carried the full time. The appearance of these infants is almost uniformly the same; their colour is very peculiar; it is a light brown, or a dirty fawn colour. Their flesh is very soft; their cuticle peels off with the greatest ease. They are always under size, often very diminutive, and their countenance has a remarkable appearance of old age. It is like that of some of the varieties of monkeys, or like that of an old dwarf, *petite vieillard*. Here is a drawing which represents one of these infants. To say that these appearances always depend on the venereal disease would be a hardy assertion, but that they often do is certain.

Let me, while on this subject, express an opinion which, although opposed to that generally entertained by accoucheurs, is, I can have no doubt, correct. It is believed that infants born in the state which I have described, have lain dead a long time in utero before expulsion, and that in fact they are putrid. Whereas, it is my conviction that this state is the result of disease, or of vital morbid actions, and not of physical changes. But I must tell you the grounds or facts upon which I have formed this opinion. In the first place, then, I was so very fortunate as to witness the expulsion from the uterus of two living fœtuses, which presented the appearances I have described. These fœtuses could not therefore have been putrid. They died almost immediately after expulsion. In the second place, by the stethoscope I have, in the *Lying-in Hospital*, detected the fœtal heart faintly pulsating through the abdominal parietes of a mother, who, an hour after, gave birth to one of these supposed putrid children. Lastly, whenever I have observed a child remain in utero so long after its death as to allow the process of putrefaction to commence, the appearances which it has presented on expulsion, have been precisely such as would have been presented by its undergoing the same process out of the body, and in no way did it resemble those infants whose organization is affected in the manner I have described. Here is a drawing of a child which had been retained in utero until putrefaction commenced. You see its abdomen has precisely the blue colour which it would acquire in the first stage of putrefaction in the dissecting-room, and has quite a different aspect from that of this child, whose state, although attributed to putrefaction, was, in my opinion, the product of diseased action. But while I maintain this opinion, I must add that there still exist facts connected with this subject, which are very difficult of explanation; for example, you will sometimes find fœtuses expelled in so dissolved or hashed a state, that you can scarcely suppose them to have been connected for a long period with the living uterus, although they must have been for some time in the state of pulp and disintegration in which they were expelled. Yet these very fragments do not seem to have assumed the putrefactive process. If it be said, in explanation, that the uterus has the power of controlling this process, so long as the portions of the dead fœtus are contained in it, I would answer, that this is possible. Yet, as I have already observed, I have seen the fœtus, when dead, undergo the common process of putrefaction in the living uterus. In fact, gentlemen, this topic is in great need of investigation, and I hope at a future period some of you may, by your labours, illustrate it. But to return, for I am wandering too much from my subject.

I have told you that infants contaminated by the venereal poison in utero, may be born either with symptoms of this disease, or apparently sound, yes, even remarkably healthy-looking, and remain free from the disease for some time after birth. Now the period after birth at which the disease shall appear, is subject to much variety. The most frequent is some time or other during the second month, seldom until after the first month has expired, and very seldom later than the second month. It does, however, sometimes occur very many months after birth; and I have observed that the symptoms which the disease presents vary according to the period after birth at which it appears. When it commences very soon

after birth, there is a pretty general affection of the cutaneous surface. The cuticle peels off in thin flakes from all parts, and on some occasions it is detached in very large bullæ. In the case represented by this drawing, you observe that the cuticle of one arm was cast off in a large bag like a glove. When the disease is slower in making its appearance—that is, when it does not commence until the infant is some weeks old, it has in general more the character of a measly eruption. On the face the patches of the eruption are often confluent, and the scales so thick, that the disease resembles psoriasis. On the nates the eruption is also, in general, strongly marked, and not unfrequently degenerates rapidly in badly-fed and ill-kept children, into ulcers, as you see occurred in the infant from which drawing was taken. If the disease be still later in making its appearance, the symptoms are such as are represented in this figure, which was taken from a child about a year old. You see there are condylomata on the labia, cracks at the angle of the mouth, and superficial disease of the inner surface of the lips. The throat and the mucous lining of the mouth are sometimes ulcerated, and the voice is very generally affected, no matter at what time the symptoms set in. Whenever the voice is affected, the respiration through the nose is impeded.

I have also remarked that if one form of symptom which may have appeared at an early period after birth, has been removed by treatment, but the malady not eradicated, the disease, when it recurs, is very apt to present the form which it would have assumed at that particular period of the life of the child, if it had not previously occurred. Thus, the older the child, the more frequently we meet with condylomata, cracks at the angles of the mouth, and ulcerations of the throat and of the buccal mucous membrane, whatever may have been the form of the early symptom. This law is not, however, universal. I lately had, in private, a case under care, of a child who was four years old, and in whom the symptoms presented much the same character all along, from near the period of birth. These symptoms were bullæ, ending in very superficial ulceration, which slowly healed, and were accompanied by falling off of the nails, baldness, decrepitude, superficial ulceration of the gums along the crown of the teeth. The child was finally cured by the hydriodate of potash, and I have reason to believe that mercury had been tried by others, before the case fell under my care.

Such then are the series of symptoms which the venereal disease generally presents in infants who have contracted it *in utero*. Now reflect for a moment on the appearances which I have described, and which you see depicted in the very characteristic drawings before you. (Here the lecturer exhibited a superb series of drawings illustrative of the venereal disease in infants, many of them lithographed, for publication in his forthcoming work on the venereal disease.) Do you not remark that, in general character, they have all the strongest resemblance to each other, and that they all belong to the exanthematous group of syphilitic eruptions? You see that they are all affections on the very surface. There are none of them pustular; none of them commenced in the substance of the cutis, as pustules do. They all commenced on the surface. Their tendency is to cause, in the first instance, desquamation or detachment of the cuticle, and this is sometimes accompanied by serous effusion; hence the formation of blebs. There is often also a tendency to fungate,—a tendency which does not occur in pustular syphilis. Lastly, whenever ulceration takes place in the congenital forms of infantile syphilis, it commences, as in the other varieties of the exanthematous group, on the surface, and not, like pustules, in the substance of the cutis. In short, the resemblance is most striking between the form of syphilis *contracted by the fœtus in utero*, whether the disease appears at birth, or subsequently, and those varieties of venereal eruptions, which constitute the exanthematous group.

Is this infantile venereal disease infectious, like the group of eruptions which it resembles? and does it propagate only its own form of disease? Experience answers both these questions in the affirmative. In this country the contamination of a healthy nurse by a diseased child is far from an uncommon occurrence. No year passes over my head without witnessing an event of this kind, and among the numerous cases which have occurred to me, I have never seen one which did not present a greater or lesser number of the symptoms which belong to the exanthematous group of venereal eruptions, and this whether the nurse has been a wet or a dry nurse. I have more than once alluded to the case of a girl whom we had in the Jervis-street Hospital, and who contracted the venereal disease from a child whom she had dry nursed; and you know that all her symptoms belonged to the exanthematous group. She had condylomata on the pudenda and tongue, superficial ulceration of the throat and membrane of the mouth, and scaly patches scattered over her body, but particularly over her shoulders. Here is a drawing of a very remarkable case which occurred also in the same hospital. The patient's name was Biddy Kelly. She was in ward No. 8. She came from the country,—from a place called Tubber. She contracted the disease from a child she suckled; not her own child. The eruption under which she laboured was, you remark,

very severe; its characters were partly tubercular, and partly those of the flat scaly class. It therefore belonged to the exanthematous tribe. I could adduce many more cases of a similar kind. It would, however, at present, be only waste of time. You have yourselves seen enough to prove that the syphilis of infants is contagious, and that the disease thereby produced in others is of the same character as the infantile disease itself, while the infantile disease clearly belongs to the exanthematous group.

Next, for the application of these facts to our present object. I have already told you that at one period I had formed the opinion that the exanthematous group of syphilitic eruptions was the product of a peculiar morbid poison. Now, it was the examination of the phenomena of the venereal disease in infants, that first compelled me to change this opinion. You appear to wonder at this, and I am not surprised at it; for, so far as I have yet spoken of the disease in infants, it seems to add support to the opinion that the exanthematous group is produced by a peculiar poison, and consequently it seems to strengthen the hypothesis of a plurality of poisons. Not so, however, when the subject is more closely examined. In short, to come to the point, I have found, on many occasions, the exanthematous group of venereal symptoms presented by children born of parents, who, from my own observation, had laboured under the common form of chancre, or that form of primary venereal disease which commences by pustule; or who had had a pustular secondary disease. Therefore, in such cases, it was evident that the symptoms in the children were not caused by any peculiar poison, but proceeded from the matter of the common form of syphilis. Thus was my opinion of a peculiarity, and, so far, consequently, of a plurality of morbid poisons, overturned. Instead, however, of the disappointment which arose from the destruction of a cherished opinion dulling my exertions, I felt an interest excited to know the source of the modification, or how it happened that a poison, which produced very determined effects in one case, produced dissimilar, but equally determined and fixed effects in another. Having reflected over and over again on the subject, a thought entered my mind, which now seems to me so self-evident that I have often felt astonished that it had not long before occurred to me. It was, that as the fœtus who contracted the venereal disease in utero, must receive the poison through the system of the parent, the poison must, therefore, be a secondary or modified poison, and that that modification may be the source of the peculiarity of the disease in the infant. But, the dogma taught in the Hunterian school that secondary or constitutional matter was not infectious, opposed all such views. I had, however, at this period, fortunately freed myself from the thraldom of that doctrine, by an examination of the phenomena presented by the exanthematous group in general, and by a knowledge of the fact that the matter secreted by this group was infectious. Thus my mind was in a proper state to view all the bearings of the question. I therefore was induced to examine the hypothesis to which I have just alluded, and to seek for opportunities to demonstrate either its truth or its fallacy. Opportunities soon occurred, and innumerable facts have long since removed every doubt on the subject from my mind. A few of these facts I will now detail in a concise manner to you.

Case 1.—A woman residing in the neighbourhood of James's-street, brought to me her son, aged about eight years. He laboured under that form of papular syphilitic eruption which, from its resemblance to strophulus, I shall hereafter describe to you by the name of the strophuloid syphilitic eruption, and he had, at the same time, a diseased or a condylomatous state of the skin round the anus. The symptoms were, in fact, evidently syphilitic; but how a boy of that age had contracted the venereal disease was the question. After further inquiry matters appeared clear; for, upon examining the mother, with whom the boy was in the habit of sleeping, I found that she had condylomata, and the remains of that form of syphilitic eruption, which, from its resemblance to measles, I call the rubeoloid syphilitic eruption. She did not seem, however, to suspect what was the matter with either herself or her child. I inquired for her husband, and I declined doing anything for her, or for the child, until I saw him. He came to the hospital on the following day, and I immediately recognised in him a patient who had been under my care in the dispensary, some months before, for a common primary pustular sore. It had been healed by the action of the nitrate of silver, and he, like most dispensary patients, then ceased, without leave, to attend. He denied, however, having had any symptoms of the disease since he left the dispensary, nor did he, indeed, seem to labour under any affection save a small fibrous wart near the site of the old chancre. He informed me that when he was unwell, and attending as a patient, his wife was in the country, and that he had no intercourse with her until after the sore had been healed. He added that when she returned to town, he felt and considered himself quite well.

We must from the evidence furnished by this case conclude, that the exanthematous group of symptoms in the wife and child, resulted from the virus of the common pustular disease in the husband; and, from the period at which the wife contracted the disease from her husband, viz., many weeks after the primary sore in him had been healed,

we must infer that the virus had become secondary or constitutional. It would also seem from this case, and from some others which have occurred to me, that, contrary to the doctrine of the Hunterian school, other secretions than those produced by ulcerated surfaces, are capable of propagating the venereal disease; for this man, if we can believe the facts affirmed, communicated the disease to his wife, although he had no ulcer from whence matter could be derived. Let me tell you the heads of another case, somewhat analogous.

Case 2.—A male, aged about seventeen years, a person apparently little removed from idiotism, applied at this infirmary. There was scattered over the surface of his trunk and limbs a number of tubercular scaly elevations, each the diameter of small peas, of a red-brown colour, and some of them slightly raised. He had also an ulcerated throat, and it was principally this that caused him to apply for relief. His throat was much inflamed, yet so evidently syphilitic in its character, that I was led by its appearance to look for other venereal symptoms, and it was then that I discovered the scattered tubercular scaly spots. He could give no account of the cause of his disease; he had no primary symptoms nor any appearance of ever having had any; he seemed, in fact, to have never had any sexual intercourse. I inquired from him with whom he slept, and his reply was with his mother. My interest in the case was such that I visited his mother, and unexpectedly found that she had been an old patient of mine, who had laboured under the pustular form of syphilis, both primary and secondary. This was therefore another case where the exanthematous group of symptoms was produced by the matter of the pustular group.

Again. I was consulted by a lady on account of an eruption. It seemed to me, at the moment, to be the rubecloid syphilitic eruption. On further inquiry, I found, in both axillæ, small condylomata, and, as far as I could ascertain from her description, the pudenda were similarly affected. She had been married about a year and a half, had had one very healthy child, which was still alive, and had enjoyed good health from the time of her marriage until a few weeks previous to her application to me. She had consulted a physician in the country, but the venereal nature of the eruption had never been suspected by him. I held a conversation with her husband; he denied in the most positive manner that he had exposed himself to any infection, or had had any venereal disease subsequent to his marriage. I examined him with great care, and could not detect any thing the matter with him save an unnaturally moist state of his prepuce and glans penis. He admitted that he had had a primary venereal disease prior to marriage, but that he had been cured of it by ———.

From the advanced age of this gentleman, from the qualities of his wife, who was a young and handsome woman, from the retired life which he led in the country, and from various other circumstances which I need not detail to you, I can have no doubt of the veracity of his statements. Hence we must infer that unless the lady contracted the disease from some other person, and of this there could not be the slightest cause for suspicion, he must have communicated it to her, through the medium of secretions which were not derived from ulcerated surfaces. Feeling, as you may suppose from the tenor of those investigations, in which I had been long engaged, a good deal interested in the history of this case, I made an opportunity of conversing with the practitioner under whose care the gentleman had been for his primary symptoms, with the object of ascertaining their nature. This practitioner, who is a person distinguished for his knowledge of syphilis, had a distinct recollection of the case. He told me that the primary symptom was a common excavated ulcer, which had commenced with a pustule, and that he had treated it without mercury internally, but with the assistance of the nitrate of silver and black wash externally. Here was, therefore, evidently another example of the exanthematous group of venereal symptoms being produced by the virus of the common pustular disease, after it had been modified by passing through the system.

I shall only trouble you with one more case, and it was in every respect so like the one which I have just mentioned, that the recital of the one might almost answer for the other. I wish, however to mention it, because I had myself an opportunity of witnessing the primary symptoms.

Case 3.—I was consulted by a lady, married about a year and a half, and the mother of a healthy child, then more than half a year old; the lady seemed out of health; her pulse was frequent; her tongue loaded in the morning; she had pains in her shoulders, and the skin of her face had lost its healthy appearance. It presented mottled patches, which were slightly sore or itchy, and the cutis in these parts felt thick, and had somewhat the appearance which it presents when affected by a certain variety of urticaria. The idea of syphilis being the cause of these symptoms, I admit, never entered my mind when I first saw her, although her husband had been treated by me some months before his marriage for a common pustular chancre, and had rather loosely followed my directions. I ordered some medicine suited to improve the state of her general health. I recommended her to return to the country;

she followed this advice, but instead of being improved by the plan upon which I had placed her, she became daily worse, and returned to town at the end of about a month for further advice. The character of her complaints then could no longer admit of a doubt. She had on the eyebrow a syphilitic tubercle covered with a prominent crust, an ulcerated tubercle on her right leg, immediately below the patella, and several scaly tubercles on different parts of her face and her trunk. I communicated the view I had of her disease to her husband. He denied in the most solemn manner that he had had any venereal complaint, or gone in the way of contracting a venereal disease since his marriage, or that he had ever had any venereal disease, save the one in which I had myself attended him, some months before he married. I examined him in the most careful manner, and could not detect any venereal appearance. He had however, like the gentleman to whose case I have just before alluded, a preternaturally moist state of the glans and inner prepuce. He also told me that he had had rheumatic pains, on various occasions since his marriage, but that they were now well.

As I had no reason to doubt this gentleman's testimony, I consider that the case of his lady illustrates the same position as has been illustrated by the other cases; that is, that the virus of the common pustular chancre is capable of producing, when modified by passing through the system, the exanthematous group of venereal symptoms.

En passant I wish to make a remark on these two last cases, although it does not much relate to our present objects. But if I do not allude to it, the symptoms presented by them may seem in some respects contradictory. Both the ladies whose cases I have detailed, had within the first year of their marriage a healthy child. How can this be explained if it be supposed that the husbands had not contracted any fresh disease subsequent to marriage? for it is evident that if they contracted no fresh disease, they must have been diseased when they procreated the healthy children. It may be difficult to explain these circumstances, but the facts were, nevertheless, as stated, and many analogous ones have occurred to me. On this subject I would make the following remarks. In the first place we have every reason to suppose that both these ladies remained free from disease for a considerable time after marriage. Was their constitution, although exposed to infection, able to resist it for this time, and did they subsequently become sufferers from the disease, because of a change in their susceptibility to the virus? This I believe was the case in the second place. Does the female, so long as she remains free from disease, possess the power of procreating a healthy child, although the father may be diseased? The two cases which I have related to you would seem to support this opinion. I have, however, I believe, seen children born with well-marked symptoms of syphilis, whose mothers were apparently free from the disease; or are we to suppose that the constitutions of the fathers, in the cases which I have mentioned, were free from disease, and that it was by a morbid *local* discharge that their wives were infected? There are many points connected with the venereal disease in pregnant women, and the present is one of them, which are still in obscurity. I shall have occasion, however, to speak again on this subject, and hope to remove some of the difficulties by which it is beset.

The facts which I have now detailed to you, are of themselves sufficient to establish the opinion which I have advanced; or that the exanthematous group of venereal eruptions are produced by secondary matter, or by matter originally derived from the common pustular primary sore, and subsequently modified by passing through the system. I could add vastly to the number of analogous facts. This is, however, unnecessary, for on the one hand you will have almost daily convincing proof of the truth of the opinion if you will only direct your attention to the subject; and, on the other hand I have to make known to you facts of another class, which remove every shadow of doubt, facts derived from direct experiment; for when my opinions respecting the source of the exanthematous group of venereal eruptions had acquired all the support which could be obtained from clinical observation, I determined to put the question to the test of experiment, and with the assistance of that instrument of persuasion which never fails to make its way to the heart, found no difficulty in obtaining subjects enough for this investigation, as I have for others of a similar kind. In short, I inoculated, after the manner described in my former lecture, with the matter from the regular secondary syphilitic pustule, and produced the exanthematous form of disease with as much certainty as when I inoculated with condylomatous matter, or with that obtained from the ulcerating tubercles. But, as our time is out, I must for the present postpone the details of these experiments.

EPIDEMIC DYSENTERY;

ITS CAUSES, SYMPTOMS, AND TREATMENT.

By JOHN JOHNSTON KELSO, *M.D.*,
Lisburn.

DYSENTERY, as it appeared epidemically some time since, in a part of this town, presented some peculiar features both in its symptoms and progress, which merit, I think, to be recorded. The epidemic originated in, and was limited to, a district called Bridge-end-Hill, and assumed, more especially in the winter months, a malignancy which but too frequently baffled the best efforts of the healing art. Bridge-end-Hill, situate as it is in a rather elevated and not unhealthy locality, on the eastern side of Lisburn, is separated from the town by the Lagan river, or canal, and numbers a population of about 160 individuals, the great majority of whom being of the lower orders of society, there occurred in all about thirty cases of the disease, while of this number twelve or thirteen proved fatal.

It was early in the autumn of 1835 that dysentery made its first appearance in the district alluded to, but it was not till the winter three months that it assumed the acme of its malignancy. The epidemic at its outbreak, and during the first two months of its existence, exhibited itself chiefly under the chronic form; afterwards it assumed the acute character presently to be described. In this we discover a manifest discrepancy from the usual march of epidemics, which in their outset and early progress are almost invariably more inveterate, effecting comparatively a greater mortality, but gradually declining down, in most instances, into milder and more remediable forms of disease.

What were the predisponent causes of the disease? Amongst the most efficient, perhaps, I may mention an unusually cold and wet autumn and winter, succeeding to a comparatively mild, though variable summer, with a culpable negligence, in some cases, of the function of fecation.

The coldness of some of the houses in this district, arising either from their superficial structure or want of necessary repairs, together with the dampness incident to floors which are formed in most instances of earth, doubtless materially contributed in debilitating the digestive organs, and in determining an increased quantity of blood to the alimentary canal. Hence the development of diarrhœa, which was so generally prevalent, both previous to the appearance and during the existence of the epidemic, in the locality in question. And as diarrhœa, of longer or shorter duration, was an almost invariable precursor of the dysenteric symptoms, it must assuredly be viewed in the light of an important predisposing cause. But since the great bulk, if not all, of those sensible causes were in full operation in other localities contiguous to the infected one, how can the fact of the non-development of dysentery in those localities be explained? Obviously this exemption from infection can only be referred to their enjoyment of a purer and more salubrious atmosphere, with the entire absence of that epidemic constitution which must have prevailed in the diseased locality.

Of the exciting causes, the most potent, I apprehend, were the frequent vicissitudes of temperature, its sudden transition from comparative heat to intense cold, the long rains, alternated with snow and keen frosts. There may be mentioned in addition, the coldness and dampness consequent on an unusual scarcity of fuel, during the autumn and winter season, with an evident deficiency in some instances of clothing. The wearing of wet or damp clothes, and sleeping on cold damp ground, with too little protection intervening, could also be occasionally traced as exciting causes. All or a few of these causes operating on debilitated, relaxed, and predisposed habits, it will not be denied, were fully capable of originating the disease. But as the epidemic attacked some individuals in more comfortable and easy circumstances, and less reckless of those means best suited to the conservation of health, to what cause or combination of causes was its propagation referable? Was it invested with a contagious or infectious influence? Possibly it may have possessed one or other of these properties, but I am in possession of no one unequivocal fact of the disease having been propagated by the operation either of contagion or infection. Even those who were in the closest attendance on the sick, and were, as a matter of course, the most exposed to the infectious emanations, if such there were, never, I believe, in any case caught the disease. Besides, had it possessed either a contagious or an infectious influence to the least extent, the sphere of its ravages, under the circumstances just announced, would hardly have been so contracted. It may be observed that intemperance, or a diminution in the quantity, or deterioration in the quality, either of food or water, could be rarely, if ever, traced as exciting causes.

Tormina and tenesmus, of greater or less intensity, accompanied sometimes with pain, occasionally only with a burning heat in the region of the cæcum, or course of the colon, were generally amongst the first symptoms which betokened an invasion of the disease. These symptoms were either accompanied with, or speedily succeeded by, a sense of coldness, chills, or rigors, alternated with increased heat, acceleration of pulse, and other pyrexial phenomena. The

alternations of the chills with the hot fits were always limited to the first few days succeeding the attack. There was lassitude, too, and a general disinclination to exertion, together with pain in the forehead, and occasionally nausea, and even vomiting and flatulence. As the disease progressed, it generally assumed the remittent type, as evidenced by the morning and evening exacerbations, leaving the intervals comparatively free from suffering. During the access, the tormina and tenesmus were always violent, accompanied generally with pain in the region of the cæcum and course of the large bowel, but occasionally only with soreness or pain in the general abdomen, exciting to frequent, but often abortive, evacuations. The motions, numbering as they did from ten to fifteen in the twenty-four hours, were, from the beginning, generally scanty and offensive, and consisted at this stage either of mucus, streaked with more or less blood, or of shreds of mucus floating in a high-coloured or bloody serum, or matter resembling in appearance coffee grounds, or the washings of flesh. Generally speaking, all traces of feculent matter entirely disappeared from the stools, with the subsidence of the first stage, not afterwards to be observed until the occurrence of a favourable change. It also occasionally happened, that a considerable time elapsed after the establishment of this change, before natural feces obtained the predominance in the stools. The tongue, even from the first appearance of diarrhœa, was, invariably, more or less, deeply coated with a cream-like substance, and furred, the edges and apex appearing either of a red, or a pale-red colour. But in the advanced stage of the more severe cases, these appearances always vanished, and the whole organ became incrusted generally with a dark-brown or black fur. In the first stage the pulse always became a little accelerated, amounting generally, as it did, to about ninety in the minute, it being at the same time rather full. It soon, however, became a little quicker and weaker, and towards the fatal termination it usually numbered about 110 or 115, being weak, tremulous, and thready. The skin in the early stage was always hot, frequently burning and dry. During the accesses the respiration usually rose to about thirty in the minute, generally regaining, however, in the intervals, its normal regularity. The urine was, in all stages, invariably high-coloured, occasionally almost red, but all micturated freely, though rather frequently. General perspiration, of uncommon profuseness, very commonly set in about the second or third week of the existence of the disease, producing marked debility. During the persistence of this symptom, the wonted intensity of the more prominent of the dysenteric phenomena usually subsided, Nor did any of those recover who perspired either long or excessively, although this symptom always gave way some days before dissolution. After its subsidence the whole surface generally became cold and clammy, evolving at the same time a highly disagreeable odour. In the last stage the dejections became generally fewer, and were either dark or muco-puriform, or consisted of dark, coagulated blood, emitting a highly fetid smell. The thirst, which, during the earlier stages, had been considerable, frequently intense, especially during the sweating stage, was now nearly absent. Thus, much emaciated and weak, the patients usually succumbed about the fourth or fifth week of the disease. A favourable issue was indicated when the stools became less frequent and somewhat feculent, and were voided without pain or straining, succeeded by the cleaning of the tongue, the return of the appetite, easy nights, with the restoration of the natural moisture and suppleness of the skin. But it is right to state, that few of those in whom the disease assumed the acute character, and persisted for any length of time, ever recovered. The chronic form of the complaint presented little worthy of remark, further than that, in such cases, the convalescence was generally very protracted, a few, after having borne up for two or even three months, being ultimately carried off by colliquative diarrhœa.

The morbid appearances of the only case where a post-mortem examination could be obtained, are detailed under the case which is appended to these observations.

In the treatment of the epidemic, on account of its asthenic nature, general bloodletting very rarely formed an item in the catalogue of remedies that were prescribed. Much more confidence was placed in local depletion, which was generally resorted to. This was accomplished by means of leeches to the most pained part or parts of the abdomen, proportioning their number to the urgency of the symptoms and the strength of the patient. The leeching was invariably followed up either by fomentations, or a succession of warm poultices. It may be stated that calomel, in what is called full doses, either in combination with, or followed up by, opium, proved invariably prejudicial. Purgatives of a mild kind, such as ol. ricini, or inf. sennæ comp., either alone, or in combination with laudanum, were always followed, for a longer or shorter time, by a mitigation of the more harassing symptoms. Opiates in combination with camphor, and, in the early stage, with ipecacuanha, were productive of the greatest benefit. Of the astringents I generally preferred the compound infusion of catechu in conjunction with the tr. of kino, and in the first stage with the vin. ipecac. Enemata of small quantities of starch, to which some tr. opii was always added, rarely failed in procuring an alleviation of the frequently harassing

tenesmus. From the soothing nature of these injections on the irritated and irritable, and occasionally ulcerated rectum, the motions would frequently be retained for a period of six or seven hours. Two or more, according to circumstances, were generally thrown up in the course of the day. External derivation, which was generally confined to the abdomen, was not neglected. Where the pain was violent and persistent, blisters frequently succeeded in removing it after other means had failed. When the pain was more diffuse or general, and of shorter standing, sinapisms, or the turpentine epithem proved equally efficacious. To complete the recovery, tonics and bitters were generally required.

In illustration of these remarks I shall content myself by relating merely one case.

Case.—R. Futton, aged 30, a lighterman, of rather temperate habits, and enjoying previously good health. I first saw him on February 1st, and obtained from himself the following history of his illness. About ten days since he became the subject of diarrhœa. Subsequently to the setting in of this affection, his appetite declined, and there was present some thirst. A few days ago the motions, which previously had been copious, became scanty, accompanied during their passage with considerable pain and straining. About the same time there appeared chills, succeeded by hot fits, with rather disturbed nights. His present state is as follows:—Frequent inclination to evacuate the bowels, but the attempts, which are accompanied with considerable pain and straining, are frequently abortive. Complains of soreness, with a burning heat in the abdomen, the soreness amounting to pain on pressure. The alternations of chills with the hot fits still persist. Skin rather hot and dry; tongue coated with a white substance, the apex and edges being rather red; anorexia; some thirst; frontal headache; pulse 90, not full, compressible; urine high-coloured, but depositing, on standing, no sediment. Attributes his illness to cold and heat received in his employment. ℞ *Ol. Ricini* ʒv; *Tr. Opii* gtt. xxv; *Tr. Rhei* ʒj; *Ag. Cinnam.* ʒj. M. Statim sumendus. Habeat *Mistur. Cret.*, and *Comp.* coch. ij post singul. dejection. Decoct. hordei pro potu.

2nd. The griping pains and tenesmus have been much mitigated since the operation of the oil, which procured five rather dark-coloured and offensive motions. Thirst increased, and the nights are restless. Mistur. contin.

3. Nine motions since yesterday, presenting the appearance of coffee-grounds. Tenesmus harassing, and he micturates frequently, but without any pain. The chills have not recurred since yesterday. Skin burning and dry; pulse 96, soft. ℞ *Inf. Catech. Co.* ʒviij ter in dies. ℞ *Gum. Opii, Pulv. Ipecac.*, aa. grs. vj; *Camphoræ* ℈j; *Ol. Cinnam.* gtt. v. M. ft. mass. pil. dividend. in viij equales. Duo tertiis horis. Foot-bath, and the abdomen to be fomented with warm water.

4. All the symptoms are much mitigated; no motion during the night; skin more moist and natural. Experiences only a little uneasiness in the abdomen, and he has had some relish for breakfast. Med. contin.

9. From the date of the last report, his amendment was so rapid that, contrary to my express directions, he considered himself capable of rejoining his employment on the 7th. During this day he was engaged in superintending the discharge of a cargo of coals from a lighter, the weather being very cold and moist. The consequence of this imprudence was the re-establishment of all the dysenteric symptoms in an aggravated degree. The motions are now frequent and sparing, and passed with great pain and a sense of smarting. They consist of shreds of mucus floating in a chocolate-coloured serum, and are highly offensive. There is considerable tenderness in, with some tumefaction of, the epigastric region, and occasionally the right rectus abdominis muscle is spasmodically contracted. Skin hot; features pale and sharp; headache; tongue deeply coated and furred; deficient appetite, with irritability of stomach; pulse about 96, rather weak; thirst intense; nights sleepless. Cataplas. sinapis. epigastric. regioni. Pil. et mistur. ut antea sumat.

10. Epigastric tenderness, and spasmodic contractions of the rectus abdominis muscle, have disappeared. Eight motions during the last twenty-four hours, with some mitigation of the tenesmus; irritability of stomach gone. The surface is bedewed with a general and rather copious perspiration. The tongue now presents the following appearance:—in its centre, from the apex to the root, runs a black stripe, about three lines broad; exterior to this the coating is dark brown, while towards the circumference it is whitish. Pulse 100, weak, every fourth beat being rather strong. Nights are easier, though still a little disturbed; there is a morning and evening exacerbacion. Omitt. ipecac. ex pilul. Adde *Tr. Kino* ʒi, singul. dos. misturæ.

11. Pain, which is aggravated by pressure in the track of the transverse colon. Ten motions since yesterday, which are rather largely tinged with blood. In consultation with Dr. Thompson, it was agreed that eighteen leeches should be applied to the most pained part of the abdomen. *Amyl.* ʒij. adde *Tr. Opii* gt. xxx; ft. enema, injiciend. mane nocteque.

12. Pain relieved by the leeching, but he complains of a deep-seated severe pain in the region of the cæcum. Perspiration profuse; thirst intolerable; pulse 99. Other symptoms as before. Applicatur hirud. xij

regioni cæci; a large poultice to the leechbites. Med. contin.

13. Pain in cæcal region though mitigated still persists. Tongue universally covered with a deep black incrustation. The motions are very frequent during the accesses. Considerable tenesmus and debility. *Emplastr. Lyttæ* cæci regioni.

15. Rather easier; tongue cleaning towards the tip; perspiration much less profuse. Twelve more leeches were yesterday applied to the right iliac region. He would not permit the blister to be applied.

17. Much the same as at last report, but rather weaker. Pulse 106, small; thirst less.

18. Is a little excited, and wanders; nine muco-puriform stools within the last sixteen hours.

20. Dorsal decubitus; complains of little pain or uneasiness in the abdomen, unless subjected to pressure, when he feels pained in the cæcum and transverse colon. The stools, which to-day are rather less frequent, consist of shreds of mucus floating in a bloody serum, and are highly fetid. There is much general debility; pulse 108, tremulous, and thready; some thirst occasionally; skin cold and clammy since the cessation of the sweating; intellects quite collected. Each injection is generally retained for about four hours, when it is voided with comparatively but little pain and straining. Habeat *Vini Rubri* ℥j tertiis horis.

23. The motions consist entirely of dark, coagulated blood, and on account of general prostration, are passed in bed. Pulse 110, scarcely to be counted; cheeks rather flushed; feels on the whole easy. Anget dosis *Vini* ℥ij.

He died on the 25th quite exhausted.

Autopsy Twenty-six Hours after Death.—In addition to Dr. Thompson, there were present Mr. Wethered, and my brother Mr. Robert Kelso. The cavity of the abdomen contained about half a pint of high-coloured serum, but the peritoneum appeared quite healthy. On slitting open the large intestines, the mucous membrane of the rectum was found studded with numerous circular ulcerations, varying in size from three to six lines in diameter, implicating merely the lining tunic. In the sigmoid flexure of the colon, the ulcerations became both broader and considerably deeper. Here they were collected into clusters, a few only being scattered here and there around, and varied in diameter from four to ten lines, their margins being generally thickened, rounded, and pale. One ulcer had perforated the bowel, while most of the rest had penetrated through the muscular coat to the peritoneum. The transverse colon was not equally diseased with its ascending and descending portions. Here the ulcerations were broader, but comparatively superficial. The cæcum and commencement of the colon presented the greatest degree of disorganization. In these parts there were five or six perforations, the largest being fully an inch in diameter. There were likewise many small ulcerations interspersed amongst the larger, which were collected into groups, that had, in most cases, penetrated to the peritoneal coat. The mucous membrane, especially in the cæcum and beginning of the colon, was of a pale colour, softened, and easily separable from the submucous tissue. The ilium, with the exception of slight vascularity of its lining membrane, was perfectly healthy. The liver was rather hypertrophied, but natural as to colour and consistence; the gall-bladder was distended with bile. Spleen and other viscera normal. The small intestines contained hardly any fecal matter. The abdomen was the only cavity it was considered necessary to examine.

Lisburn, April 13, 1836.

ACCOUNT OF THE

HABITS AND ILLNESS

OF THE LATE

CHIMPANZEE.

By W. YOUATT, *Esq., Lecturer on Vet. Med. at the Univ. of London, and Vet. Surg. to the Lond. Zoological Society.**

CONTRIBUTION TO COMPARATIVE ANATOMY.—INTESTINAL FEVER AND ULCERATION.

THE Chimpanzee belongs to the order quadrumana, the genus simia, and the subgenus troglodytes. While the orang outang is of Asiatic birth, the chimpanzee is an inhabitant of the intertropical portion of Africa, and there alone has hitherto been found. He is, probably, the barris, or great wild man of the African woods, of which vague accounts have been given by travellers. He was seen 300 years before the Christian era, by Hanno, the Carthaginian. The skeleton of an adult chimpanzee is preserved in the museum of Mr. Walker, of Curzon-street: but few living ones have reached Europe, and they have survived their arrival in Great Britain a very little while. They have all exhibited much affection for those who had the care of them: but no opportunity has yet been given to ascertain, whether this quality gave way in the adult animal, as in the orang, to obstinacy and ferocity.

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* Condensed from the *Veterinarian* for May, 1836.

In structure, the chimpanzee approaches much nearer to man than does the orang. Mr. Owen, the sub-curator of the Hunterian Museum, has proved, in the *Transactions of the Zoological Society of London*, that the chimpanzee occupies the first step next to man in the descending series of beings. The facial angle in the chimpanzee is 35°, in the orang it is but 30°. In the young chimpanzee the cranial portion of the skull preponderates over the facial, and, as in the human infant, the development of the brain is great compared with that of the frame, though, as the animal grows, the brain does not grow in the proportion in which it does in man: in the orang, the cavity of the cranium is scarcely enlarged at all as the animal grows. The aquiline nose of the chimpanzee, compared with the flattened elongated bone of the orang, is a startling approximation to the anthropoid character. The smallness of its canine teeth, compared with the formidable weapons of the orang, and their approach to the unbroken proximity of those of man, are also very striking.

Its clavicles keep the shoulders more widely apart, and have the same curve as in man. The humerus closely resembles that of man. The peculiar twist of it is very evident. The radius and ulna are more curved, leaving room for greater muscular development and attachments. The upper extremities are longer than those of man, and shorter than those of the orang; they reach only to the knee in the chimpanzee; they extend to the ankle in the orang. The relative size and strength of the lower extremities are much in favour of the chimpanzee, as compared with the orang, and establish a closer relationship to man.

The animal at the Zoological Gardens was purchased from a party of natives on the Grain Coast of Guinea. They had shot the mother, who was nursing it in her arms, 120 miles up the country. When brought to the Zoological Society, it was supposed, from its teeth, to be then about fifteen months old. It was nearly two feet in height. The adult wild chimpanzee is probably not more than four feet high. It soon forgot its mother and forests, readily attached itself to those who took notice of it, and was suffered to have the whole range of the ship. It would climb with an agility which no sailor could equal. It would spring fearlessly from one rope to another, courted the notice of every one, and, except when unmercifully teased, was always ready for play. At the gardens, a Guernsey frock was provided for him, and a little sailor's hat; and as he sat within his cage, gazing composedly around, he looked like an old weather-beaten sailor. The likeness was too strong to be pleasing; and the writer was long before he could get rid of a feeling, almost of loathing, when he paid him his usual morning visit. The animal was never so happy as when he could throw his arms around his keeper, and bury his head in his bosom. Of this position he was never tired. He was perfectly obedient to this keeper, and also very much attached to the housekeeper, having, indeed, even more fondness for her than for the keeper, and this increased when he became ill; he would then cry piteously to be taken into her lap; but he took liberties with her which he never attempted with the keeper; he would assume all the airs of a sick and petted child, and once bit her very severely in the hand. His face and hands were washed, and his hair was combed every morning; and he would very orderly strip himself for this purpose, grasping the cuffs of his Guernsey frock, and drawing his arms out, one after the other, quickly; or if the sleeves were too tight, he would turn the body over his head, and so draw out his arms. He never, however, could dress himself again, although he often attempted it. He enjoyed being tickled while on his back, hallooing, chuckling, and laughing almost with the identical laugh of the human being. He loved mischief. He would tease the puppies that were in the same room—plague the mother—give no rest to another dog that was there, in his turn submitting to be teased, and not a little roughly handled by them. When he had not them to play with, or when ordered, he would climb a tree in his cage, and leap from bough to bough, or get into his swing, an adept in the art of balancing, or play with a large ball, his countenance then brightening up to a degree that could hardly have been expected from its usual grave expression. But in his most sportive play, there was nothing of the restless quickness of the monkey—no chattering and grinning on every surprise; but a superiority of character, approximating to that of the young of our own race, though very distantly. On no occasion, indeed, could I discover—and I looked anxiously for it—any indications of intelligence superior, or even equal, to some of the domesticated animals. The gravity of his countenance seemed in him, as in many human beings, to cover lack of thought. The only times when I had some doubt about this, and thought he was playing the hypocrite, were, when I have seen him sitting in his quiet observant way, his eyes wandering from one to the other of us, as we were talking, perhaps about him; and I have fancied that there was a pout at the person who was finding fault with him, and a half-smile for his advocate. Yet he had not the slightest power of speech, though he could scream loudly, and not unlike a child; but it was only a considerable difference of intonation in the grunt that marked his approbation or his displeasure.

His food consisted of fruit, milk, biscuits, and, now and then, a little cooked meat; his favourite food was ripe apples, always

carefully pared, and which he would give to his keeper for that purpose. He began afterwards to be very fond of sugared tea, and occasionally he was clamorous for the porter of the keepers. He would carry the cup to his lips, and drink precisely like the human being, except that his lips protruded considerably farther. When occasionally out of temper, he would utter a hoarse guttural sound, and look with the perfectly natural expression of anger, sometimes trying to seize the hand of the offender, and bite it; but his anger soon passed. He exhibited no aversion to any quadrupeds. It was, however, tried whether an animal so young, which probably had never seen a formidable snake, would display fear at one. Accordingly a large snake was shown to him; he was at once filled with terror, and hid himself in a corner. The lid of the basket containing the snake was then closed, and an apple placed on it; and though he desired the fruit, he would not venture near the place, but by gestures expressed his consternation; nothing, in fact, would induce him to approach the basket.

But, after all, the real habits and *intellect* of the chimpanzee remain to be ascertained. He apparently enjoyed perfect health, until the 29th of November, 1835, when he suddenly lost the use of the left leg, and when he attempted to put it to the ground he cried with pain. In a few hours the use of the right leg was gone: he could scarcely move at all; it was a crawling kind of motion, and he cried dreadfully. I was in doubt whether it was a case of rheumatism or cramp. I gave him three grains of calomel, and ordered plenty of friction to be used during the afternoon and night. On the following day he was quite well, and so he continued until February the 27th, when his appetite failed; he was restless; he had an anxious countenance; and his paw when he gave it to me, for by this time he and I were sworn friends, was hot. There was no apparent local affection. He was feverish. I ordered two drachms of the sirup of buckthorn to be given in his tea. Several medical gentlemen afterwards met me in consultation. Pallidness was stealing over his dark face; his ears were lividly pale, and his countenance expressed much anxiety and debility. He would play a little when we coaxed him, but he was becoming irritable. Another dose of the buckthorn was ordered. 29th. The symptoms had increased; his medicine has not produced the desired effect. Double the quantity.

March 1st. He must be coaxed to take the least particle of food. His bowels are not yet thoroughly opened. Give two grains of calomel at noon, and two drachms of the buckthorn at night. 2nd. The medicine has operated well, and the feces were exceedingly offensive. A little better. He ate an apple, but he is continually coaxing to be nursed.

3. More disinclination for food. A surgeon joined me in consultation. It seemed to us to be a case of infantile fever, without any local determination. Two grains of the white antimonial powder morning and night.

4. Altogether worse. The pulse did not indicate bleeding, for, although it had risen to 104, it was weak and almost intermittent; nevertheless I determined to bleed him. He was now impatient of control, and his hide was tenfold more difficult to pierce than that of a dromedary which I bled almost immediately afterwards, and I did not get more than twenty drops of blood from him. Two grains of calomel immediately, and repeat the antimonial powder in the evening.

5. As the bowels were now again confined, give sirup of buckthorn with the antimonial.

6. Apparent improvement. The pulse has fallen to 96; but his temper is changed, and he is rapidly wasting. Yesterday as soon as I entered the room he stripped up his sleeve, showed me the puncture of the lancet, and scolded at me; and when I offered him my hand, he tried to draw it through the bars in order to punish me. He did the same to-day, but after much coaxing we again were friends. The bowels are confined. Give two grains of calomel, and, two hours afterwards, two drachms of the buckthorn.

7. The medicine operated well, and he is better. He again showed me the mark of the lancet, but he immediately afterwards offered me his hand, and intimated that he forgave me. Another surgeon of repute saw him, and pronounced it to be a case of *teething*: but I could not find the slightest enlargement, or heat, or tenderness of the gums. This gentleman did not approve of the calomel; it was therefore discontinued, but the antimonial powder was given as before.

8. He scarcely touches milk; he will not eat, and, altogether, he is worse. The bowels not acting, I once more gave him his calomel, and the antimonial at night.

9. The calomel has caused the evacuation of a load of pultaceous feces, which it seemed scarcely possible for him to have contained; but he is very low and dull. A surgeon who had previously seen him, again met me in consultation. We fancied that we felt a slight enlargement now of the posterior part of the upper gum on the right side; and there not being, even to the present moment, *the slightest indication of any other local affection*, except that I fancied that his head felt a little hot, we determined to treat it as a case of teething. The gums, above and below, and on both sides, were deeply lanced, and on the right side of the upper jaw I did cut down on a tooth. Give him

half a drachm of calcined magnesia in the morning, and two grains of antimonial powder at night.

10. A great change has taken place since last night. The pallid look has returned, with an increased pitiable expression of the countenance. The strength is altogether gone. He will not sit up above a minute at a time. He would not drink the milk in which his magnesia was put, and therefore it was forced upon him; and now he is suspicious of every body, and will not touch the slightest portion of food. Try the magnesia once more in a little tea, but never again drug his milk. He will not touch his tea; then force the medicine upon him, and give him two grains of ginger in each dose of the magnesia. After the first dose he had a copious, but, for the first time, a mucous discharge per anum, and tinged with blood, and then he appeared to be sadly depressed. P.M. A little revived. The feces are now almost the colour of bile, with flocculi of coagulated milk. Give to-night half a drachm of calcined magnesia, with the same quantity of the sirup of white poppies.

11. Not worse. The mucus has disappeared from the stools, and the feces are pultaceous. He again drinks his milk. Continue treatment.

12. A very little better. The feces, however, again resemble whey with flocculi of coagulated milk. The same surgeon wished to see what mercury would effect, and, in addition to his magnesia and poppy sirup, five grains of the hydrargyrum cum creta were given.

13. The medicine frightfully purged him; it operated ten times, and at length produced much mucus and blood. The head keeper was terrified, and came down for me. I was compelled to go out of town, but ordered two drops of the "black drop" every two hours in arrow-root. After the second dose the purging was staid. He looked a little better. This was Sunday, and there was a grand council of medical men, with whom I was desired to confer. The result was, that we gave him no more of the mercury, but half-drachm doses of prepared chalk, with a little ginger, and two drops of the "black drop." Asses' milk to be substituted for that of cow's milk.

14. Better. He recognises me the moment I enter the room; he climbs his tree when bid; feces natural, but his pulse still 120. He is fond of his asses' milk. Continue treatment.

15. Much improved. He recognises every old friend with his usual chuckle, and has eaten a little bread and butter. Give him as much asses' milk as he likes. One of the surgeons recommended small doses (five minims) of the liquor potassæ in his milk, with a little ginger. I pleaded for a holiday for him, at least for one day.

16. Going on satisfactorily. He will not eat, but drinks plenty of milk. He is to have his potash to-day, which sadly disagreed with him. He vomited twenty times, with a few streaks of blood. The feces were likewise tinged with blood. Give three times daily half a scruple of prepared chalk, with two grains of ginger, and two drops of the "black drop."

18. The sickness and purging have ceased, and the poor fellow is a little more lively, and takes milk both of the cow and the ass. Continue medicine.—19. Drinks his milk with appetite, notices every one about him, and is better tempered; but he refuses the choicest fruits, and touches nothing solid. *He also coughs.* I would rather anything than this. Rest awhile.

20. Lively, but paler; his eye more sunk, and the cough more frequent and evidently painful. This was Sunday, and, although secluded as much as possible, he was occasionally broken in upon. The Duchess of Kent, with a large suite, was at the gardens, and, as a matter of courtesy, he was exhibited to her. He seemed much fatigued and feverish, and he would hardly notice any of us in the evening. His pulse rose to 150; I attribute but little of this to the exhibition, but to the progress of the disease. The gentleman who had attributed the whole affair to *dentition* was there, and expressed himself somewhat strongly on the subject in my absence. After consulting with a physician on whose judgment I placed every reliance, and fancying there was a little heat where I had cut on the tooth before, I again lanced the posterior part of the gums on both sides, above and below, but could feel no teeth; I also lanced the gums in the course of the canine teeth; he struggled against all this, and cried most piteously. We agreed that he should not have any medicine at present, as the feces were almost natural. The gums bled freely. Towards evening he became much worse; the breathing was so laborious that he almost seemed as if he were breathing his last; however, in an hour, he was quieter.

21. The disease has essentially changed its character. I can hear him breathe at a considerable distance, and the cough is more frequent and painful. His pulse is 150, and he is sadly weak. He is half unconscious, except that on being touched, or even looked at, he breaks into fretfulness and screaming. We put him into a warm-bath, but he struggled and screamed, and was speedily taken out. Feces natural. Give him half-drop doses of the "black drop," with two grains of ginger, three times every day. Dilute his milk, and offer it to him more frequently.

22. Does not breathe so laboriously, nor cough so frequently or painfully, and the pulse is 140, but as weak and thready as ever; he is, however, still more lost to sur-

rounding objects. My valued medical friend met me at the gardens. We both thought that the only chance of success lay in rousing the animal power by some mild stimulant, and we determined to give him a couple of drachms of ginger tea three times in the day, coaxing him to take diluted milk frequently. In the evening he seemed better, but though he brightened up for a moment or two, his eyes speedily closed, and he looked as if he were dying.—23. He seems a little better. In the evening he climbed up his tree of his own accord. Continue the ginger tea.

24. Cheerful; evident appetite; but his countenance still more pallid. In the afternoon there was a sad change. The face was *blanched*; eyes sunk and almost closed; the lower lip fell, and he scarcely noticed any one. His milk, however, he would slowly sip when put to his mouth, a tablespoonful at a time. His pulse felt with the greatest difficulty, and it fluttered most singularly. His feces begin to pass involuntarily. Double the stomachic.

25. Hope has now quite fled. The only notice which he takes even of his old nurse, who loved him almost as if he were her child, was to slowly open his eyes, and gaze piteously for a moment on her or his keeper; then the lid drooped, and a feeble breathing and a faint moan were the only indications of life.

At eleven o'clock at night he all at once roused himself, and began to scream violently. He was wrapped in a blanket, and held on the lap of his keeper, to whom he clung closely, frequently feebly raising his head and gazing piteously on his face, during about an hour, when the screams lessened, and assumed a painful resemblance to the cries of a sinking infant. By two o'clock, on the following morning, they had gradually subsided. He then attempted to free himself from the blanket, which, with assistance, he accomplished; then with an effort, of which a moment before he seemed to be incapable, he flung his arms around the keeper's neck, clenched his hands for firmer hold, threw back his head a little, brought it before that of the keeper, gazed intensely on his face, with a remarkable expression, so continued for one or two minutes, gradually loosened his hold, let fall his arms, and died without a struggle.

He was examined on the following day. I could not be present, but Mr. Martin favoured me with an account of the post-mortem appearances. "The death resulted from great visceral disease. The spleen was tuberculated, and united to the adjacent viscera by strong adhesions. The lower portion of the ileum was extensively ulcerated, and in several places the coats of the intestines were completely destroyed, and, had it not been for extensive adhesions at this part, the contents of the bowels must have escaped into the abdominal cavity. The cæcum also participated in the disease. The mesenteric glands were morbidly enlarged, and the liver was diseased, its colour being of a grayish yellow, exhibiting the minute portal vessels gorged with blood. The lungs were tolerably healthy, but the substance somewhat firmer than in their natural state. They may be said to have been hepatized in a slight degree; they were, however, unobstructed. Dentition had nothing at all to do with the affair."

NEW METHOD OF TREATING

HYDROCELE.

To the Editor of THE LANCET.

SIR: To simplify the operations of surgery is a desideratum in the practice of our art; I consider that plans which inflict the least pain are the safest, and consequently the best, inasmuch as they less endanger life. The palliative mode of treating hydrocele has been by puncturing with a trochar and emptying the fluid. Now instead of using the trochar, my plan is to puncture with a very fine needle, until a drop of fluid oozes out on withdrawing the needle, and in three days the hydrocele will entirely disappear, no matter in what quantity the fluid may be collected. In small hydroceles the manner of cure is not perceptible, but in large accumulations an effusion may be seen in the cellular tissue from the tunica vaginalis, and of course is absorbed in three or four days from the time of pricking with the needle.

It may be asked, what advantage is to be obtained by this mode over the more painful operation of emptying the fluid at once. In the first place, there is no danger of wounding the testicle; secondly, the accumulation of water proceeds more slowly after this method, than after the sudden emptying of the hydrocele; thirdly, the simplicity of the operation does away with the necessity of waiting until there is a large collection of fluid before having recourse to tapping. I have tried the above plan in numerous instances for the last two years, and therefore can vouch for its success in every case of hydrocele. I am, Sir, yours truly,

D. LEWIS.

28, Artillery-place West, Bunhill-row,
May 4, 1836.

EXAMINATION OF THE GASES

CONTAINED IN THE

CAVITY OF THE PLEURA

OF A PERSON AFFECTED WITH

PNEUMO-HYDROTHORAX.

By M. MARTIN SOLON, *Physician to the Hopital Beaujon, Paris.*

A BAKER, aged thirty-six, apparently of strong constitution, enjoyed good health up to the month of May, 1834, at which time he was seized with hæmoptysis, which continued for twenty-four hours. This was followed by a catarrhal affection, which obliged him to remain twenty days in the hospital. After this he returned to his occupation; but four days afterwards, a restrained and distressing cough, accompanied by a sanguineous expectoration, forced him to give up his work. Returned to his family, this person experienced much anxiety for many months. Upon the 8th of September 1834, he suddenly felt a sharp pain in the right side of the chest. Afterwards he was seized with a shivering fit, which was of short duration, and he was compelled to return to the Hopital Beaujon the next day.

He is now sensibly emaciated, the respiration is quick and short, the cough dry, and accompanied by a sharp pain in the right side of the breast, which is so acute, that percussion can scarcely be borne. The pulse is strong and frequent; he has no appetite; the tongue is red and moist; the bowels are costive. The patient is so severely held, that the medical investigation is very painful to him. Ordered to be bled at the arm, and fifteen leeches applied to the pained part of the chest; julep, pectoral ptisan; low diet.

The pain of the side was diminished by the abstraction of blood by the leeches, and was entirely removed by the application of *flying blisters* over the thorax. We can now examine the state of the case very accurately. The fever and dyspnœa continue; he remains seated in his bed; he can nevertheless lie down upon either side, for a very short time, but when he attempts to lie upon the left side, he experiences an augmentation of cough, which forces him immediately to resume the sitting posture. The right side of the chest is evidently more distended and augmented in volume than the left. The respiration is on the left side *puerile*, and is now considerably removed from the right side. In holding the ear firmly under the arm-pit, or over the clavicle or shoulder-blade of that side, we hear a noise similar to that of a liquid containing gas when agitated in a vessel. The sensation of the *tide* or *wave* is not known to the invalid himself, although the by-standers hear the noise at a considerable distance. The sound of the voice and of coughing may be heard over better than two-thirds of the thorax; the gurgling murmur is more distinct, but we find no metallic tinkling. We observe that the patient now labours under confirmed pleurisy, occasioned by the rupture of tubercles within the cavity of the pleura costalis, followed by pneumo-hydrothorax. Ordered the actual cautery over the right clavicle, and in the arm-pit. Pectoral ptisan, mixed with tar-water; light diet.

Towards the end of September and beginning of October, the fever diminished, but did not cease altogether. The expectoration was mucous, and improved in appearance, and the patient could now enjoy sleep at night in the recumbent posture. There was no night transpiration, and the appetite became improved to a certain degree. He was ordered pectoral drinks, and two pills, each containing half a grain of belladonna; soups.

October 5. Slight arterial hemorrhagy from the cauterized parts. Continue the same remedies.

8. He is affected with bleeding hemorrhoids, which heretofore seldom troubled him.

11. Diarrhœa; cough not so troublesome; lies easily and readily upon the back; the countenance is sensibly fallen; the hemorrhoidal discharge has ceased. His strength gradually fails, and upon the 15th he expired.

The body was inspected the next day, and a pint of gas was collected from the pleural cavity, and at least half that quantity was left in the thorax. This gas had no particular smell nor colour. It did not inflame when an ignited body was plunged into it, but the ignited body was instantly extinguished thereby. The lime contained in lime-water was precipitated by this gas, and the tincture of turnsol was reddened by it. This gas contained sixteen per cent of carbonic acid gas, and in other respects the results did not essentially differ from those obtained by Dr. John Davy. We were satisfied by experiments that oxygen gas was absorbed and carbonic acid gas disengaged. Nitrogen was also obtained. The experiments of Sir Astley Cooper also prove that healthy serous membranes absorb such gases as come into contact with them; but it is certain that such membranes do not exhale gases.

May we not deduce some practical consequences from these facts? After the analyses which have been mentioned we may infer that pneumo-thorax is prejudicial to the invalid, as much from the *qualities* of the gaseous collection as from the *volume*. We are satisfied that the composition of the

air contained in the cavity of the pleura costalis of this patient, approached in its nature to that which is found after death in the bronchial cavities.

We apprehend that the volume of substances contained in the pleura costalis of pneumo-thorax cases, may by its weight and pressure cause asphyxia, and we are of opinion that the air ought to be evacuated from the thorax, in our attempts to remove the disease, as has been fully explained in Dr. Davy's case.* Dr. Davy found the following proportionals of gases contained in the cavity of the pleura costalis of his patient:—Carbonic acid 12.5; nitrogen 85.5; oxygen 2; total 100.

*** In the above translation of a valuable paper in one of the French journals, we have limited ourselves to the essential facts. Respecting the gases which circulate in animal bodies, whether they be contained in the alimentary canal, or in the arteries or veins, or in the cavities, we agree with Dr. Solon in his remark at the conclusion of the paper. The skilful evacuation by puncture of air or pus in the cavity of the pleura, whether the case be considered one of pneumo-thorax or empyema, is sometimes the only remedy to save life.

Dr. Apjohn, in the "Transactions of the Association of the College of Physicians of Dublin," has given an analysis of air taken from the pleural cavity, and though the *same* gaseous substances were ascertained to enter into the composition of the air in that case, they were not found to be in exactly the same proportions. Indeed this could not be reasonably expected. Dr. Apjohn's analysis gives:—Carbonic acid 8; oxygen 10; nitrogen 82; total 100.

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ACETATE OF STRYCHNINE IN PARALYSIS.

A GIRL aged twenty years having fallen upon her back, became paralyzed in her inferior extremities, in the bladder, and in the rectum. She had passed urine for many days. The bladder was enormously distended, and the swelling of the urethra rendered the introduction of the catheter very difficult. Dr. Oesterlen prescribed an emulsion composed of linseed, sweet almonds, nitre, and tincture of cantharides. Volatile liniment, to which oil of henbane was added, was rubbed over the hypogastrium, and frictions of volatile camphorated liniment were used over the spine. Soon afterwards the absence of fever and of every inflammatory symptom permitted recourse to be had to phosphoric pomatum.

Laxatives and enemata being ineffectual for the relief of the bowels, croton oil was administered.

In eight hours, finding that these remedial measures did not succeed, one-sixth of a grain of acetate of strychnine (in wine vinegar) and two ounces of distilled water, were prescribed, of which twenty drops upon sugar were taken every hour. This dose was augmented progressively to half a grain, which at first had no effect, but in five days, during which time five grains of the strychnine were used, the invalid all at once experienced a great disgust, extreme anxiety, cold sweats, headache, pain in the region of the bladder, and a sensation of heat and itching through the whole course of the urethra; at the same time there was great irritation and itching of the skin, which was covered with an eruption. The strychnine was instantly discontinued, and a little nitre was the only remedy prescribed.

On the next day it was found that the above-mentioned unfavourable symptoms were greatly abated. During the night the patient passed involuntarily a small quantity of urine, which gave a scalding sensation in its passage.

Things continued in this state for five days, at the end of which time the strychnine was again had recourse to, producing the same effects as mentioned above, but with less [illegible]. The urine flowed so freely [illegible] not again required involuntary, and [illegible] restored [illegible] bowels [illegible] of enemata [illegible] patient [illegible] round [illegible] to [illegible] walk [illegible] rds; [illegible] leted, [illegible] pinion [illegible] ove all [illegible] ction.—[illegible], Mar.

ANOMALOUS SYMPTOMS DURING PREGNANCY.

To the Editor of THE LANCET.

SIR: As the subjoined case is rather a singular one (and in a pathological point of view particularly so), if you can give it a place in your valuable Journal I shall feel obliged, and remain, Sir, your most obedient servant,

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Surgeon, &c.

Southampton, 9, Portland-st., April 20, 1836.

In October last I was called to attend Mrs. ——, aged 39, who was in the fourth

month of pregnancy with a third child. The circumstances of the case were as follows: Her previous state had been healthy, and unattended with any peculiar symptom. A day or two before she applied to me she had complained of extreme lassitude, attended with pain in the back, round the lower part of the abdomen, and extending down the thigh, all which was attributed by her to having used much exertion for some days before. Towards the evening of the second day, the symptoms having become more urgent, attended with considerable discharge, I was sent for. On my arrival I found her in a state bordering on syncope; the lips livid; the extremities cold; pulse hardly perceptible, except during the accession of pain, which occurred about every ten minutes.

I directed warmth to be applied to the feet; total quietude in bed, with the following draught and mixture:—℞ *Spirit. Ammon. Aromat.* ʒiss. *Liq. Opii Sed.* gutt. xxx. *Misturæ Camph.* ʒiss.. f. haustus stat. sumendus. R. *Infus. Rosæ* ʒvi. *Tinct. Opii* ʒiij. *Acid. Sulph. Dilut. Aromat.* ʒij. M. cujus sumat cochl. larg. ii quartis horis.

I visited her at about noon on the next day, and found her state much improved, she had had several hours sleep, and the pain had nearly left her, though the discharge continued, and a number of coagula, some of a large size, had passed away. I directed the mixture to be continued, and finding that the bowels had not been evacuated, I directed an enema to be administered. The pulse was nearly 90, and the skin moist, and on examination I found the os uteri dilated to the size of a crown-piece, very soft and yielding, and the parts cool. This state of things continued for a few days, when the discharge ceased, and I heard no more of the patient for nearly six weeks, when I was again sent for, and found her in the same state as before; under the same treatment she again recovered; and then stated that she could distinctly feel the movements of the child, though I expressed my doubt on the subject, not being able to satisfy myself on the point, her size not being in the least increased, and the breasts small and flaccid. However, in about the same interval of time the symptoms again occurred, and continued for nearly a week, the discharge being profuse, and the coagula in size and quantity almost incredible. The movements of the fœtus could now be plainly felt, and she appeared to rally more decidedly after this attack, than at either of the former ones. I heard no more of her until called to her delivery, which commenced with the discharge, as before; the labour was perfectly natural, and completed in about four hours; the child was still-born, but evidently had not been long dead; it was perfect, and not by any means emaciated; the placenta came away without difficulty, and was perfectly natural; and the patient recovered with great rapidity. I should remark that the woman was addicted to intemperate habits, being frequently inebriated, which kept her in a state of debility.

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The Factory Inquiry at its commencement divided itself into two parts, the one medical, the other political. It was necessary to determine the influence of factory labour on the health, the mortality, and the general physiological condition of the operatives, and if either of these should prove to be deteriorated, it was the business of the commissioners, in seeking for a remedy, to avoid cramping the productive industry which really enriched the nation and increased its power and means of comfort and enjoyment. To only the first part of the Inquiry do we now invite attention.

The terms of the commission were very general, but it is evident that the medical department would embrace, as the main objects of inquiry, the following particulars:—The proportion of deaths among the different classes employed in factories; the quantity of sickness, or the number constantly sick and disabled; and the average proportion attacked out of a given number annually; the mean stature and weight of the body, the strength, and physiological state of the respiratory, digestive, and nervous

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Things continued in this state for five days, at the end of which time the strychnine was again had recourse to, producing the same effects as mentioned above, but with less intensity. The urine flowed so freely that the catheter was not again required, though the flow was involuntary, and not attended by pain. The remedy restored sensibility to the system, and the bowels were sufficiently opened by means of enemata. At the end of seven weeks the patient could retain her urine, and could walk round her room by the aid of a crutch.

Some weeks afterwards she returned to her usual occupation, and could walk rapidly, the feet being turned outwards; and though her cure was not completed, nevertheless Dr. Oesterlen was of opinion that the waters of Wild would remove all that remained of her paralytic affection.—*Medicinisches Correspondentz*, Blatt, Mar.

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systems; the prevailing forms of disease; the temperature, hygrometricity, ventilation, and impurities of the atmosphere of factories; and, finally, the amount of labour performed, measured by its time and intensity.

That the determination of these questions demanded extended, laborious, and well-conducted examination every one will admit; and that any thing which the Factory Commissioners have yet published will avail the true purpose of the inquiry no one will contend. They have collected a great deal of information, innumerable opinions, and many scattered truths, but in vain do we look for any data sufficiently exact or extensive to furnish a satisfactory account of the mortality, the sickness, the peculiar diseases, or the general sanatory condition, of the factory population; much less do the Reports furnish any means of estimating the comparative health of this and other portions of the labouring classes.

This ungratifying result is partly owing to the natural difficulties of the inquiry; but less equivocally to the manner in which the inquiry was conceived and conducted.* The Reports bear witness to much industry, to much expensive examination, conducted in the most amiable and impartial manner, but every individual seems groping alone in the dark, making no observations which are capable of being connected and compared, and producing a great aggregate result. No one appears to have proposed to himself in the outset, the problem — "*How can the state of health of a mass of people be determined?*" or to have ever effected its solution. Every new statistical inquiry needs some device to meet its peculiar exigencies, and to reduce it to the simple and ordinary form; but here, far from finding any statistical invention or scheme of observation for the occasion, we have not discovered that the *well-known* methods of investigation were employed, that all the open sources of information were resorted to, or that from ascertained facts their legitimate consequences have been deduced. After all the labours of the Commission have come to a close, no Commissioner can pretend to affirm on substantial evidence, that the health is better or worse in the manufacturing than in the agricultural districts.

It is of great importance to the community that this question should be determined; and that the influence of occupation on the health of all the great sections of the people, should enter as an element into their economical calculations: so that the capitalist may no longer think of improving his machinery, and employing men, women, and children, only to produce the greatest return of profit; nor the operative take into consideration merely his actual wages, without bearing in mind that the human frame performs its functions according to laws which cannot be violated with impunity, that it has energies which may be exhausted, a structure which may prematurely perish, or be left an impotent wreck through years; and moreover, that the sanatory errors, as well as the sins of a people, are visited not only on their future life, but on future generations. The cotton manufacturers admit very willingly, that in many branches of industry, life and health are sacrificed; and Mr. Tufnell, one of their most zealous and intelligent advocates, has enumerated several occupations in which "infant slavery is so severe, as would seem to make life a torment, and death a mercy." Without using statements so strong as this, it is too evident, that in all employments in which large masses of the working people are engaged, much pain, much sickness, and death, are incurred, which half the ingenuity spent in perfecting the products of manufacture would obviate. We recollect seeing together in an hospital three youths,—a factory boy who had his fingers torn off by machinery; a miner, whose skin had been scorched by the fire-damp; and a farmer's lad suffering from rheumatism and pericarditis. The factory boy, sallow, of slight muscular development, but of acute perception and intellect, had suffered from uncased machinery; the miner from a badly ventilated mine; the agricultural apprentice had been the waggoner's slave; ignorant, roused from rest early in the morning, flogged at will with the horse-whip, exposed to rain and cold, and walking all day on the rough soil, his joints became distorted, his feet flat, and at length his heart enlarged from rheumatism, caused by exposure to wet and cold.

If the consequences of exposure to un-

* These remarks apply exclusively to the medical part of the inquiry.

healthy agents, and of indulgence in unhealthy practices, could be brought home directly—if diseases could be always shown in immediate connection with their causes, half their difficulty of the suppression would be overcome; for it is only necessary to deprive remote suffering of its contingency, to make people shun its cause, as they would thrusting their hand into the fire. But although the quantity of sickness and the mortality are augmented to a certain extent by every deleterious influence, this escapes, when not very extensive, the common eye. If each human life extended to forty-five years in one case, and to fifty in another, every-body would perceive the difference; but where in both instances life terminates at every interval between 0 and 100 years, the comparative difference in the duration of human existence, although equally great, can only be perceived by taking the mean duration of several lives; a task beyond the capacity of any ordinary mind unassisted by calculation. The same classes of persons in different circumstances may have annually, on an average, one, two, or three weeks of sickness; but as the attacks would occur at uncertain times, and be of variable length, a small increase would not be detected without calculation: a danger in which one person in fifty invariably suffered would be avoided; where he sometimes did, and sometimes did not suffer, it would be braved by those who knew not by observation that the constant *probability* of injury remained the same. This is precisely the state of things with men employed in unhealthy occupations. The mischief to which they are exposed is uncertain as to time and person, but certain in aggregate amount. Hence the Government should take proper measures for determining the aggregate amount of death and sickness incidental to the factory, and other classes of labourers; and the establishment of a positive connection between deteriorated health and excessive labour, or any other cause, would operate more effectually in promoting its removal, than a law sanctioned by even legislative authority.

It is a rule in statistics, that to determine in two cases the force of any morbific influence, other influences should be equalized; so to ascertain the relative health of persons working in factories, their age should be registered, and the effect of residence in towns should be taken into account,—long since pointed out by the eminent Dr. Price as most destructive of life. On the other hand, to discover the effect of excessive labour, the effect of a plentiful supply of food must be borne in mind.

The means of investigation to which the Factory Commissioners resorted, were the examination of witnesses, manufacturers, operatives, and medical men; personally visiting the factories, and the working people; and instituting statistical inquiries. It has been shown, that men in every circumstance are liable to sickness and death; that this liability only differs in degree and aggregate amount, which, when not very extensive, is determined with difficulty; that healthy and unhealthy are merely relative terms, which, to be asserted on merely personal experience, require that this should extend to at least two numerous classes of individuals for a long period; and all this will scarcely prepare the reader for the conflicting nature of the factory evidence. Truths, not very obvious, are made to bear any construction by prejudice. Few men will call black white, or white black, but there are many intermediate shades which they will place in either group according to their sense of colour, and to the light in which they stand.*

The *Factory Committee* is well known to have presented a very deplorable picture of the children in cotton mills, which is flatly negatived by Mr. Tufnell, the author of a report in many respects admirable. This commissioner states that "the notion of the children being injured by their labours, is repudiated in the greatest manufacturing district in England!" According to his report, "factory work is twice as healthy as other work" (p. 196); nay, it is an antidote to fever, cholera, and scrofula.† Mr. Tufnell proceeds further, and pronounces on a still more difficult matter; from the fact, that factory and non-factory

* Several of the more candid witnesses may have adopted, in a less profane sense, the reply of Margutte to Morgante, inquiring whether he believed in Christ or Mahomet.

Se egli crede in Cristo o in Maometto.
Rispose allor Margutte, per dir tel' tosto:
Io non credo più al nero che all'azzurro;
Ma nel cappone o lesso o voglia arrosto,
* * * *
Ma sopra tutto nel buon vino ho fede.

They evidently only knew that their interests leaned to one or other side of the question.

† "Gad, we found the factories to be a specific for the scrofula!" (The late Mr. Gavin Hamilton, thirty six years surgeon to the Manchester Infirmary p. 196).

women in the town of Stockport had illegitimate children in that proportion he affirms, "that the former are *nearly four times as moral in respect of chastity as the latter*," although, in the same way, it would be possible to prove that the courtesans of London are vestal virgins! Of further differences and contradictions among non-medical observers, the voluminous reports and evidence will furnish abundant examples. The following will show into what positive error, or vague statements, medical men fall, when they trust only to conjecture, grounded on loose observation, in estimating the state of public health.

Answers to Medical Questions proposed by Dr. Bisset Hawkins.

"Is the mortality amongst factory children greater than in other classes?" (p. 234.)

Dr. Forester.—"I am inclined to believe it is, although to institute a fair comparison between such children, and those of artisans and agricultural labourers not so employed, more precise data are requisite than I am possessed of."

Mr. Fox.—"I am unable to say whether a greater proportion die who work in factories than who work at other laborious occupations; there are certainly a greater proportion of the working classes die than of those who do not work."

Dr. Baker.—"I hear it is greater."

Mr. Hill.—"I think not."

Mr. Charles Borough.—"Decidedly so; many dispensary patients are children working in factories, the mortality amongst whom is certainly greater than amongst children of other classes, especially during the time of any prevailing epidemic."

Dr. Bent.—"I have no certain data which enable me to answer this question satisfactorily, or to any useful purpose."

All these answers are from medical gentlemen in Derby; they refer to the same class of workmen engaged in the same manufacture. The remaining nineteen queries are answered with the same unanimity. The question, "Are there any diseases or accidents to which factory children are particularly subject?" is answered nine times in the affirmative, and nine times in the negative, by the medical men of Manchester and Preston. It is generally admitted that the children suffer from accidents in the machinery, but by some these are declared to be slight; by others, severe and frequent (p. 237-8). Is it unnecessary to give further proofs of the inconclusiveness of such testimony?

It only remains to notice the statistical researches of the commission, which afford data more likely to answer the purpose of its inquiry. The most important document of this nature is the section of Dr. Mitchell's report "On Sickness in Factories" (p. 58-61); who thus explains the manner in which the returns were obtained:—

"In the greater number of factories, the returns were made from the recollection of the operatives, who were, one by one, examined as to the time they have lost by sickness during the preceding twelve months. Such inquiry could, therefore, only be an approximation; but as the operatives, during their loss of time, not only were subject to the pain of diseases, but also in most instances to cessation of income, or if, through the liberality of the masters, they were paid, those paid were under medical surveillance, they could probably, in most instances, tell very correctly; and if some exceed, others might fall short, so that the average might not be far from the exact time."

From these observations Dr. Mitchell has calculated tables, over which "Sickness in the Factories" is placed. There are two columns; one headed, "Average Duration of Sickness per annum for every Person employed;" another, "Average Duration of Sickness per annum for every Person sick." By stating only that the observations were few, and not giving the number of each group of observations answering to the several ages, Dr. Mitchell has deprived these tables of much utility and authority; to which, however, we shall recur at another time; here it is enough to show that the "sickness in the factories" is not represented by observations so collected. Admit that 1015 persons commenced working in a factory on the 1st of January 1833, and that none quitted the service on any other account than sickness; then, on the 1st of January 1834, they would be reduced, according to observations on the East India Company's labourers, to 994 by death, and to 985 by invaliding for chronic diseases chiefly. Is it not evident, that by proceeding to the factory on Jan. 1, 1834, and questioning the remaining 985 persons, learning the days they (the healthy) had lost by sickness, and dividing their sum by 985, Dr. Mitchell would not obtain the "average duration of sickness per annum for every person employed;" and that seated in his examining chair, he could only accomplish this by

having the power to call before him all who had been discharged for ill health, or of evoking the dead from their tombs? The error would increase in proportion as the masters were inhumane, or the occupation was insalubrious.

There are no other statistical operations relating to factories of any extent; several of the detached observations shall be extracted in our next number. The desultory statements collected at benefit societies or hospitals, and scattered through the evidence, require no remark.

Have the Commissioners failed in determining the comparative health of the factory population because the task imposed on them by the Legislature was impracticable? Certainly not. The population returns, the records of benefit societies, and enumerations of the numbers actually *living* and *sick* in the manufacturing and a few other districts, would have completely solved the problem proposed by Government; they would have afforded an accurate census of the health among the factory, and other great classes of the working people.

Mr. Sadler's Tables, deduced from the *Mortuary Registers* of a rapidly-increasing population, presented deceptive results, and exaggerated the mortality of children, as was forcibly pointed out by Mr. Drinkwater; his statistical speculations were rarely solid, but on this subject he was probably misled by Mr. Rickman, who is accidentally remarkable, not for having committed innumerable blunders himself, but for having induced a greater number of other persons into error than is usual to one of so limited a capacity. "Si cæcus cæco dux fuerit itineris, ambo in foveam cadent!" By employing actuaries to deduce the mortality from the living at different ages enumerated in 1821, and perfecting the return of burials by examining the dissenters' and private registers in Lancashire and a few other counties,—in manufacturing and non-manufacturing towns,—a close approximation to the influence of factory labour on the mortality may have been obtained. When the return of ages was made in 1821, the persons in Manchester, Leeds, and some other manufacturing towns, intrusted with the census, showed so much less intelligence than nine-tenths of their fellow-labourers, that they did not enumerate the ages; by which the difficulty of the inquiry is somewhat enhanced, without, however, being rendered impracticable.

The Central Board of Commissioners in their instructions directed attention to the benefit societies, in which the occupation of the members could be distinguished: from this source, although syphilis and some other disorders are excluded, a very near estimate may have been obtained of the amount of *sick-time* incidental to the factory and other classes at different ages, and of different sexes. No extended information of this description has, however, been published by the Commissioners, although it may have been easily obtained from the secretaries, for a small remuneration. Just as a great mass of invaluable observations on sickness were accumulated by that excellent institution the *Highland Society*, possessing none of the powers of a parlialiamentary commission.

Enumerations of the numbers *living* and of the numbers *sick* at each age, distinguishing those working from those not working in factories, and extending over several of the manufacturing districts, would have furnished, in connection with the ascertained mortality, an accurate criterion of the health of the operatives, and of the influence of factory labour, if the difference between the classes examined was at all marked or permanent. To an enumeration of this kind, no objection in point of principle can be made, further than that to obtain a fixed mean proportion, several enumerations would be required; which is undoubtedly true; but for the purposes of the Commission such nicety would not have been necessary. The details of enumeration would have offered several minor obstructions; but none which labour and persons of a moderate genius in this sort of research could not have overcome. As an objection to the practicability of this operation, some will urge that the prejudices of different classes would lead them to make false returns: and we do not deny that where self-interest appeared to interfere, this would be done by a certain number. As, however, the knowledge of the present state of public health, and of any cause of its deterioration, is calculated to lead to the removal of disease and suffering, and thereby to promote the permanent good of all classes, manufacturers and operatives, it would not have been difficult to convince the

most vulgar capacity of this truth; and that it was the *interest* of all to make correct statements. By extending the examination to the mining, agricultural, and other large classes, its invidiousness would be diminished, while its utility was increased; and Parliament would be rescued from the charge of empirical legislation,—of doing many things with imperfect data, and of providing only partial remedies for general evils.

We shall recur to the subject.

THE LANCET.

London, Saturday, May 7, 1836.

It has been at length resolved, we understand, that Mr. Colles is to bid a long farewell to "the pride, pomp, and circumstance," of the chair of surgery in the Royal College of Surgeons in Ireland. His career certainly closes with the present medical session; and better, perhaps, would it have been for his reputation, and for the cause of medical science in that country, had such career never begun, than that it should thus conclude. His successor too, we believe, upon good authority, has been fixed upon in the same decree of the College proprietors; and only awaits the secondary formality of an election, to be publicly gazetted. Thus in all perverted institutions, evil follows evil in monotonous succession, until man is cheated even of the fortuitous favours which chance sometimes dispenses from her varied urn. But we are anticipating the conclusions flowing from those reflections which the wants we have just alluded to naturally excite, and which we should first premise.

Mr. Colles, and the establishment with which his name has been so long identified, commenced their course almost together, and excited no small degree of expectation in the public and the profession in Ireland. For a time, indeed, these hopes seemed to be in the progress of realization. However narrow the policy which dictated the first charter of the institution, and however deficient in judgment and knowledge the minds might have been which dictated and carried into effect the system of education pursued there, still it must be admitted that the College gave to Ireland a practical school of medicine, and a class of practitioners which she did not previously possess. But the edifice was reared upon far too limited a basis to give all the efficiency to the working of such an establishment of which it might have been rendered capable. By the narrowness of its regulations, which excluded all but indentured pupils from its patronage, and necessarily forced them into the Scotch and English diploma markets, it perpetuated many of those evils which it proposed to remove. Its ignorant laws, in fact, expatriated those who should have been the objects of its generous and patriotic anxiety. The money standard of professional fitness for becoming a pupil, or a member, was vigorously acted upon; and the most expensive and aristocratic school of medicine was the impolitic result, in probably the poorest country of Europe.

Great however as was this error, it was surpassed by the system of education adopted, and the mode in which that system was carried into effect within its halls. The *curriculum* was as exclusive in principle as the charter of the establishment was illiberal and imprudent. The whole excellence of medical education was made to turn upon an empirical knowledge of anatomy and surgery; and until the last few years these qualifications alone were insisted on at examinations for the diploma. Scarcely any other subjects were taught to, or used in examining, the pupils of the Institution. Holding the office and exercising the influence which Mr. Colles did, it is impossible, we say, not to connect him with these evils. He not only did not exert the powers possessed by him for their prevention, but, most unfortunately, abused them in the production of these mischievous results. No man, indeed, indulged more freely in the fashion-

able follies of medical education prevailing in his day, than the Professor of the Dublin College of Surgeons. Appearing on the stage at a time when the light of HUNTER's fame and that of his successors was yet leading astray the medical profession of Great Britain from the old paths of pathological investigation, Mr. COLLES also mistook the *ignis fatuus* for the unerring splendour of a new luminary, and pursued the illusion to the utmost limits of its aberrations. In the adoption of this pernicious course, no individual in his sphere was more likely to do harm than Mr. COLLES. He possessed respectable qualifications either for good or for evil. To a sound understanding, much shrewdness, and laborious habits of application, he united conversational fluency, considerable powers of description, and an abundant vein of sarcastical humour. All these qualities, irresistible by combination, and mischievous by their tendency in a wrong direction, but too successfully accomplished the objects for which they were exercised in the class room—the concentration of the mind of the Irish student on surgery alone, and a contempt for other branches of medical science. When the poison of prejudice and error is thus infused into the youthful mind through the *medium* of wit and authority, the effects may be reasonably expected to be commensurate with the fatal cause of their production. Never was this truth more disastrously verified than in the audiences which hung in raptures around the chair of the surgical professor of the Dublin College, as he mingled his admirable descriptions of disease with the keenest effusions of irony against the manners, the attainments, and the pursuits of the then rival branches of the medical profession. We could name hundreds whose minds, blighted by the operation of these pernicious influences, still,—among the verdure and freshness of the modern method of pursuing professional studies,—continue as arid, stunted, and sterile, as the plant whose beauty has been withered, and vegetation destroyed, by the scorching blast of a Sirocco.

Yet, with all these defects in the constitution and curriculum of the College, and with all the erroneous opinions and practices promulgated by its principal professor, there was a period in the history of the man and the institution, of which Ireland might have been proud, and might have looked to with a hope of progressive improvement. That era, however, lasted but for a short time; the hope of it was soon disappointed. To both a period succeeded, in which the "few virtues" of the College and its professor disappeared, leaving nought for the pained vision to dwell upon, save the "ten thousand crimes" of the former state of things, henceforward to be multiplied at will, by additional agents, of an inferior order in talent, and holding principles of a more despicable character than had yet been brought into general operation in the institution. This was the era of the organization of the College school, when the monopoly—once, undoubtedly, intended for the advancement of medical science in Ireland—was degraded into an oligarchical combination of low speculators in medical education for pecuniary considerations alone, and to which Mr. COLLES was not only a consenting but an active party. Upon the baseness of the objects contemplated in this perversion of a national institution into a mere junto for individual aggrandizement, the profligate means by which the scheme was accomplished, and the ruinous consequences which have resulted from it, we need not here describe; they have been too recent in occurrence, and too heinous in their nature, to be soon forgotten. But it is time to turn from the past to the future, and examine how the conduct of Mr. COLLES, if permitted to operate unrestrainedly in this instance, will affect the institution from which he is about to depart. At another time, and under a different order of things, in an establishment of this kind, such an inquiry might have its use,—such a discussion might be produc-

tive of the best consequences. But in the present condition of that debased institution, no such speculations of the utility of inquiry and of admonition are to be indulged. Already the subject of such a disquisition is irrevocably disposed of. Mr. COLLES having done his share of mischief during his possession of place, has taken care, in conjunction with his worthy colleagues, to secure a successor who will perpetuate those evils which Mr. COLLES only abandons because years and infirmity incapacitate him to continue them. While Paris is at this moment exhibiting the splendid spectacle of a "concours" between the ablest and best qualified men of their age for a similar appointment, need we do more than point to the melancholy contrast in Dublin, where one or two men, and those often the most profligate in principle, are able to dispose of the first professional offices in the country over a bottle of wine or a supper of oysters! Just as the will of DUPUYTREN was, some time ago, disclosing to Europe the generous love of that distinguished individual for science and his fellow man, we recollect having to record the appointment of Mr. COLLES' son, by his father, as surgeon to Steven's Hospital! And now, as if to draw attention more particularly to the vile trick with which he terminates his professional existence, the "concours" is being held before our eyes in Paris, and demonstrating the necessity for the introduction of that institution in these countries. It is, however, as we have before remarked, a matter of little importance who is to fill the chair of surgery in the Dublin College. That body has ceased to be capable of either serving or injuring the cause of science in Ireland, as its surgical professor will find on counting his class in the ensuing session. What the name and patronage of the College could not effect for Mr. KIRBY, need not be expected by one accepting office under similar circumstances. In private schools the remedy for abuses and corruption of this kind will not be found until the consummation of reform is effected by the legislature; and it is gratifying to reflect that in no city are the private schools better qualified to supply this antidote than in Dublin at the present moment.

A PARAGRAPH of some length, reflecting maliciously and infamously on the character of the members of the medical profession, was published in the *Morning Chronicle* of Thursday, but it is due to the respectability of that paper at the same time to state that it was confessedly extracted from a work entitled the *Law Magazine*. The periodical from which this extract has been taken, may, for aught we know to the contrary, be a well-conducted work, but we were not before aware that such a publication was in existence. If, however, the paragraph be a fair specimen of the truth and justice which generally signalize its comments on public events, it will most likely preserve, inviolate, its present unenviable obscurity.

The title of the paragraph in question is almost as curious as the text:—

"THE LEGAL *versus* THE MEDICAL PROFESSION.—(From the last number of the *Law Magazine*.)—The new Poor-law proceeds with a steady march, crushing in its way much sessions practice. It has crushed also much medical practice. And here the public will observe the different behaviour of the two professions. The reduction of the sessions practice has been from averages of forty appeals to six, five, and one. Leaders of sessions have had their incomes reduced several hundreds a year; several have been compelled to abandon the sessions altogether; a great amount of learning, the result of much labour, is at once rendered useless; yet they are aware that the change is beneficial, and, without affecting to conceal its severity, they make no complaint. The medical men, on the contrary, who are simply prevented from charging exorbitantly for casual poor, and checked in making the parish pay their patients' bills, are banding together, and forming medical trade-unions, with the view of petitioning Parliament to obstruct the change and keep up their emoluments. The commissioners fix prices for their remuneration, much greater than were gained by any of them for the separate parishes; but this is not enough, they clamour for an increase:

the commissioners then say that they shall fix their own prices by competition or open tender. But this satisfies them still less, and they clamour louder and louder, as if the country were about to be depopulated because the consumption of pills is to be reduced. The commissioners have compelled the attorneys, in a great number of instances, to compete for their places, and to transact, as clerks, all professional business for costs out of pocket. Yet do they murmur? Does the Law Society in London, or do any of the local societies, weary the Government with their complaints, or the House with their petitions? We believe it may be proved that no profession has ever made larger sacrifices of interest for the public good, silently and unostentatiously."

In vindicating the character of one profession, we do not find it at all necessary to attack that of another. The commendations, therefore, which this libeller of the medical profession has bestowed upon the profession of the *law*, we are by no means desirous of withholding from that body. If we viewed barristers and attorneys as enemies, our feelings of hostility would derive no small share of satisfaction on finding that such a worthless and disreputable scribbler was their constant eulogist. The dunce has attempted to draw a parallel between the conduct of the two professions, under circumstances which his stupidity has inclined him to believe have originated from the working of the Poor-Law Amendment Act. Hence this paragraph,—which, if we mistake not, *was penned in Somerset House*, and first printed in the thing called a "Law Magazine," for the very purpose of concealing from the public the source of its birth—this paragraph opens thus:—"The new "Poor Law proceeds with a steady march, "crushing in its way much sessions prac- "tice. It has *crushed*, also, *much medical* "*practice*, and here the public will observe "the different behaviour of the two pro- "fessions."

The "difference" consists in the *silence* of the one profession, and the *complaints* of the other, arising out of the change of circumstances already stated. Well, to be sure, there is nothing like impudence when a false impression is to be created. This scribe claims credit for the members of the "legal profession," because practitioners at Quarter Sessions are silent from a loss of business consequent upon *the removal of causes of litigation*. In like manner would he refer to the keeper of the House of Correction as the pink of forbearance and disinterestedness, if he refrained from clamouring for the recovery of a salary, the payment of which had been withheld from him in consequence of the discharge of the whole of the prisoners from his jail!

In the *sessions* practice, *litigation*, we take it, was a source of advantage and profit to the members of a particular profession. But how is the case with regard to *medical* practice? Is the individual who has a dislocated limb returned to its proper position, a fractured bone nicely set,—is such an individual, or is the person who performs those services for the remuneration of a few shillings, the greater gainer? But the POOR-LAW AMENDMENT ACT has "crushed much sessions practice." How? *Why by "crushing" the sources of litigation.* The POOR-LAW AMENDMENT ACT has also "crushed much medical practice." How? *By crushing the sources of disease,*—THE HUMAN BODY. In a medical point of view, there can be no doubt, from the information which we continue to receive, that, whatever may be its effects among the able-bodied poor, it is a slaughtering instrument among diseased paupers,—a fact which, sooner or later, will be known to the whole community. If the Poor-Law Commissioners, or the Boards of Guardians, or any other persons, can destroy the poor with facility and impunity, the Government will soon be ridded of the inconvenience of complaints from medical practitioners in the Unions. But it happens that the medical practitioners are *men*, and, consequently, the claims of humanity find an echo in their bosoms. Their avocations lead them to the habitations of the poor, and, observing the destitution and sufferings of the sick, it *does* happen,—however strange it may ap-

pear to some persons,—that medical practitioners become the friends and advocates of the helpless. When it is alleged that medical men complain, "because they are "prevented from charging exorbitantly for "casual poor," it may also be alleged that a more gross falsehood never appeared in print. They make no complaint of the kind. All that they require is, that a remuneration should be awarded for their services, which shall ensure to the poor *adequate* medical attendance in cases of sickness. It is also stated, "that the com- "missioners fix prices for their remunera- "tion, much greater than were gained by "any of them for the separate parishes." If the writer mean to imply, by this ill and ignorantly written sentence, that the amount of the aggregate payments for the parishes in the new Unions, exceeds the aggregate amount of the contracts for the same parishes before the Unions were established, the writer has again meant to state an untruth; because it is well known that in one of the "regulations" issued by the Poor-Law Commissioners, it is decreed that the sum which is to be paid for the medical contracts in the Unions shall in no case *exceed* the amount of the contract then existing, or existing immediately preceding the time of issuing the regulation. The injustice of the *previous payment* is not to be taken into account. "We cannot," say the Poor-Law Commissioners, "justify our "masters in having enacted the Bill, un- "less we reduce the poor-rates to an ex- "ceedingly small amount. In no instance, "therefore, shall there be an *increase* of "charge, but there shall be a *decrease* in "every case where it is possible to effect "one, *whatever may be the results.*" We mentioned an instance the other day of a medical practitioner having been literally *compelled* to take the charge of *fifteen* parishes in one of the Unions, for the sum of seventy-five guineas *per annum*. The extremities of the Union were upwards of ten miles asunder, and the population amounted to upwards of five thousand persons. Is not such a "contract" part of a system for legalizing human butchery in this country? It may be alleged that the payment is adequate, because there was found a practitioner who would undertake the duty. In what other "contracts," in the most ordinary pursuits of life, is the *mere undertaking of the "contractor,"* deemed an adequate security for the fulfilment of the trust? In all the *other* contracts, even for the Unions,—those for bread, meat, soap, &c., the contractors are obliged to find sureties, in responsible persons, for the strict execution of their respective engagements. Not so in the contracts relative to the treatment of the sick-poor. Unknown adventurers have been received by the Boards of Guardians, and their appointment has been sanctioned by the Poor-Law Commissioners, although they could give no proof of professional qualification, beyond the production of a mere "certificate" from a medical hall,—asked for no collateral securities, desired to produce no testimonials in proof of their *moral* competency.* The great body of the profession have felt that such a system was degrading, insulting, and inhuman. They have raised their voices against its continuance, and their exertions, we are rejoiced to tell them, are operating *most effectually* in the proper quarter. The skin of the persecutors is smarting under the lash which has been inflicted, and still is in course of infliction, by the persecuted. The publication of such base and infamous calumnies as we have extracted from the

* Our readers may remember, that one of these adventurers obtained the exposure due to avarice in a recent Number of THE LANCET, in some account of the proceedings at the Wheatenhurst Union. We understand that the "contractor" has since sent in his resignation to the Board of Guardians. We need hardly say that the duties of the office were not performed as they ought to be. Even if the Poor-Law Commissioners' surgeon had been inclined to fulfil them, the great extent of country over which he engaged to travel would have defeated his object.

Law Magazine, and which were inserted, as we firmly believe, in that work, *by authority*, in order that their extraction from that work by the *Morning Chronicle* might divert suspicion of the quarter whence it originated, will not, we suspect, induce our medical brethren to relax in the efforts which they are so nobly making,—not so much to procure payment for themselves, as protection for the sick-poor.

CLUB-FOOT.

At the meeting of the *Academy of Medicine*, Paris, on the 19th of April, M. Guerin presented the description of a new method of treating club-foot in children. This consists in simply surrounding the foot with a case of plaster of Paris. The limb which is the seat of the deformity having been covered with some fatty substance, and enveloped in a flannel band, is suspended on transverse cords in a wooden box; the foot is then submitted to extension in a sense contrary to the direction of the deformed foot, and a quantity of moist plaster of Paris placed round the limb, which is firmly fixed until the plaster has become solid; this obtained, the whole mass is removed from the box, and the superabundance of plaster pared off with a knife; only a thickness of from three to four lines is left round the leg or foot. The apparatus is renewed every eight days. M. Guerin has employed this method with success on several children. Two infants, twins, each 5 months old, were affected with double club-foot (varus equinus), the right feet especially were very much deformed, the plantar surface perpendicular to the horizon, and the dorsal completely turned outwards. The right feet alone were submitted to the action of the mould, and after seven applications, repeated every seven days, they had recovered their normal configuration. They were left six days without any apparatus, to see if the cure was complete, and have since shown no tendency to deviation.—*Gaz. Med. de Paris*, No. 17.

DISEASE OF THE GALL-BLADDER.—FORMATION OF PUS IN THAT VISCUS.

At the last meeting of the *Westminster Medical Society*, Dr. Johnson detailed the following interesting case. Mr. Tozer, a chemist, residing in Piccadilly, aged about 35, applied first about eighteen months since, to Dr. J., labouring under symptoms of dyspepsia; for five years before, he had frequently been subject to symptoms of the passage of gall-stones. These symptoms did not recur whilst he was under Dr. Johnson's care, which was till the period of his death, a few days since; his symptoms were so changeable, and frequently so opposed, at his various visits, that Dr. J. began to consider his complaint to be merely imaginary. One symptom, however, always was present, and he invariably complained of it,—a deep-seated pain in the region of the liver. Several careful examinations of that organ were instituted, but no kind of disease was detected. The bowels were sometimes constipated, sometimes very irritable; the feces always contained bile, and were apparently healthy. Three weeks before his death, on presenting himself one morning, he was evidently much worse, his countenance was expressive of great pain; he had rapid pulse; the pain in his side had become intolerably severe, and he had had a rigor. Dr. J. now began to think the matter serious, and ordered him leeches to the affected part, and advised him to go home and keep in bed. Nearly seventy leeches were applied before the pain was relieved. Repeated rigors, with fever, came on, and dysenteric symptoms, with copious discharge of blood from the intestines; these kept increasing in severity till his death, which took place in three weeks. Two gentlemen who attended him with Dr. J. considered that he had died from the formation of an abscess in the liver. Dr. J. was at a loss to account for the symptoms. After death, directly the abdomen was opened, a tumour of a globular form appeared projecting from the liver at its under edge on the right side; this was supposed at first to be the abscess, but on prosecuting the dissection it was found to be the gall-bladder considerably enlarged, and filled with pus and biliary calculi, in all the stages of formation; the gall-bladder had become adherent to the duodenum, pancreas, and kidney of that side, indeed to all the surrounding viscera, and was with difficulty separated from the liver; the internal coat was in various parts in a state of ulceration; in others it had become thick and hardened. The liver was free from disease, except that the pori-biliarii were much increased in size; the ductus communis was not much enlarged; the cystic duct was completely obliterated; the intestines were healthy. He (Dr. J.) should consider that the ductus cysticus had become inflamed in consequence of the presence of gall-stones, and had thus entirely lost its caliber; the presence of calculi in the gall-bladder had brought on inflammation there, and in consequence pus was thrown out. He believed there had been no passage for cystic bile for the space of two years. Would such fact

account for the various symptoms experienced by the patient?

A discussion on the Thames water was renewed, when Dr. GRANVILLE stated, that a plan had been proposed, and was to be carried into effect at once, for the purpose of preserving the Thames from pollution; it was the formation of sewers on each bank, for the reception of all the cloacæ &c., which were afterwards to be collected for useful purposes.

The meetings of the Society will continue during the month of May.

MEDICAL DRUG ASSOCIATION.

To the Editor of THE LANCET.

SIR: Allow me to draw your attention, and that of the members of the medical profession in general, to the great benefits which would be likely to originate from the formation of a metropolitan and provincial joint-stock medical wholesale drug association. It is not easy at once to state what sum might be required to carry it into operation, but there is no doubt it would be readily raised by shares, and the purchasers of them should consist of medical men only. To give as many as possible an opportunity of supporting it, it would be desirable that the shares should be of small value (say five or ten pounds each), and that no subscriber should be permitted to possess more than from twenty to fifty shares. After paying a good per centage out of the profits, the surplus money could either be repaid to the subscribers, in liquidation of their subscriptions, or it could be appropriated towards the institution of a general medical relief fund, for the use of the afflicted or superannuated members of the association, or it could be applied in any other way, as, after due consideration, might be determined on by the majority. The principal place for the transaction of business must of course be in the metropolis, and every city or principal town in the kingdom must have an immediate connection with it, and have in it an established depot, and from such sources all the medical practitioners connected with the association could readily obtain their medicines. By the adoption of such a plan not only the most genuine drugs would at all times be procured, which is an object of the most essential importance, but they would be always forwarded with regularity and expedition when required; and, moreover, the various shareholders would partake of an equal proportion of the profits resulting from the combined employment of their time, talents, capital, and drugs, which are now so advantageously engrossed and enjoyed by people totally unconnected with the profession. If the principle of the measure which I have thus taken the liberty of briefly unfolding be approved of, a more detailed plan of operation might soon be contrived and put into general circulation; and I feel fully convinced that it presents *one* mode by which the members of the medical profession have it within their *own* power of *permanently* benefiting themselves.

I am, Sir, your obedient servant,

FRANCIS BORTON, M.D.,
One of the Physicians
of the Malton Dispensary.

Malton, 26th April, 1836.

*** We give insertion to this letter, but not with the expectation of being enabled to devote space to many communications on the subject. Having found room for the suggestion, the developments of a plan and all further announcements regarding it, will necessarily assume a character which should confine them as commercial advertisements to the cover of THE LANCET.

EPPING UNION.

REMARKS BY MR. RIX ON THE REPLY OF MESSRS. DOBSON AND GODDARD.

To the Editor of THE LANCET.

SIR: I am well aware that the pages of THE LANCET may be much better occupied than as a medium for the settlement of medical disputes, nevertheless I must beg you to insert in your next number the following reply to some observations respecting myself, contained in a letter from Messrs. Dobson and Goddard, in *explanation* of proceedings which lately took place in the Epping Union.

As regards the first part of the charge against Messrs. Dobson and Goddard, I can say nothing, not having been present at the first meeting of medical men; I will only observe that, if untrue, there were present friends of those gentlemen, who have had, and still have, the opportunity to refute it.

No sooner had the terms offered to the medical men of the Union made their appearance by advertisement, than I was informed that the district in which I reside (and two out of three parishes of which I had attended for years) had been applied for by Messrs. Dobson and Goddard; at this information I was much annoyed, and, at the moment, felt almost inclined to undertake the district on any terms; but not wishing fully to commit myself, I wrote to the Board of Guardians, to the effect that I should become a candidate for the district in which I lived, provided that, on opportunity being afforded me, I approved of the details of their plan. This was a fortnight before the day of election; in the interim, having

made myself better acquainted with the nature of the plan proposed to us (that of a medical club), I became fully aware that it was not likely to reward the exertions of the medical attendant, or to benefit the poor. I consequently declined it. It is not true, therefore, that I was appointed surgeon to the district, unless, indeed, the appointment could be made without the consent of one of the contracting parties, viz. myself; I having made use of the power from the first reserved to myself, of accepting or rejecting the offer, upon being made more fully aware of the nature of the measure.

I am perfectly ready to admit that I received a letter from Messrs. Dobson and Goddard, and to the purport they have stated; but it was not on the day they wrote to the Board of Guardians, but two or three days subsequently, and, indeed, after I had sent mine. In their letter they informed me of their application for my district, but stated that they would not undertake it, if I was willing to accept it on the proposed terms; they also said, that their reason for applying for it was their having an opponent.

I must confess, that this communication on the part of Messrs. Dobson and Goddard, went far to allay a soreness of feeling which existed on my part, on account of their having taken the parish in which I reside, the preceding year, on lower terms than I was willing to do. Still I must ask, Why not have allowed me to make my own terms, or at least to have made the attempt? By their application, they reduced me to the alternative of giving up the parishes altogether, or undertaking them on terms I *considered* unremunerating and degrading. It is true, that in all probability I should not have been able to have made terms for myself, and that the rod of chastisement might have fallen on my shoulders, as it has done on those of some of my professional brethren in the Union: still it had been better the blow had been so inflicted, than have come from a quarter from which we should rather have looked for co-operation and support. In conclusion, I bear no feeling of hostility towards Messrs. Dobson and Goddard, but as I have not attacked, so neither could it be expected that I should step forward to defend them. I am, Sir, yours obediently,

W. B. Rix.

Matching, May 4, 1836.

AMPUTATION AT THE HIP-JOINT AT THE MIDDLESEX HOSPITAL.

To the Editor of The Lancet.

Sir: You have displayed a high degree of feeling for the interests of humanity, but always so tempered by a strict adherence to the principles of justice that I have no fear in expressing the sentiments which arose in my mind on the perusal of a letter in your last number, signed "Humanitas."

The severe and certainly tremendous operation performed by Mr. Mayo seems to have afforded your correspondent an *available* opportunity, not to serve the dictates of humanity and justice, but to throw odium and disgrace upon that gentleman. Is it honourable, Mr. Editor, to attempt by such expressions as "heartless butchery," and "cut their way" to the temple of fame, to warp that judgment, the free exercise of which the case now imperiously demands?

Instead of first placing before you the full particulars and history of the case, thus giving your readers some grounds to form an impartial decision, in all the language of ignorance and prejudice your correspondent calls upon you, invoking all the sentiments of humanity, to condemn a practice he ought previously to prove unjustifiable.

Should we, upon the expressed opinions of Sir C. Bell, Mr. Arnott, and Mr. Tuson, pronounce the operation a barbarous method, practised alone to satisfy the cravings for fame? and because "I will" were the words with which Mr. Mayo made known his determination, shall we accuse him of heartless cruelty and presumption? It is not necessary to ask for your reply. I am acquainted with the history &c., and will take care that Humanity shall not in this instance be left unattended by her sister Justice. I am, Sir, yours obediently,

Justicia.

May 3, 1836.

I question if the operator rests his line of reasoning or "defence" upon the flimsy arguments alluded to.

COLLEGE-SERVANTS' FEES.

To the Editor.—Sir: I had the honour, some weeks back, to be served with a diploma at Lincoln's Inn Fields, by paying 22*l.* (for I cannot say that I was *examined* on the occasion, although a few simple questions certainly were put me). After the needful oaths had been administered, we were politely bowed out by Mr. Stone, who looked exceedingly *pocketish*. At the bottom of the stairs graciously stood another servant to show us into the cloak-room, *vulgo* "funking-room." In the cloak-room stood another servant to courteously hand us our needfuls, and at the door was another politely to open it for us. I should not omit, amongst the fee-lovers, Mr. Belfour, who does not think it beneath him occasionally to receive a golden fee.

There was no mistaking all this; the cast of countenances easily betrayed it. Knowing it to be quite "hoptional," I heeded not the appearance of things. But, Sir, ought a

wealthy corporation to allow this? Are medical students to be thus beset, after paying a very large fee, and encouraged, in a moment of exultation, to squander money not really their own? I remain, Sir, your obedient servant,

A New M. R. C. S.

April 30, 1836.

To the Editor.—Sir: As you are doubtless much in the confidence of the surgical officers of Guy's, can you tell me what has become of Mr. Morgan's book, entitled "Lectures on Diseases of the Eye," to which, in common with many of my fellow pupils, I became a subscriber fifteen months ago, with the understanding that it was to come out last April twelvemonths? If I mistake not, when Mr. Morgan gave his surgical prize last year, he promised copies to some whose essays had pleased him. Perhaps, when he gives his prize this year, he will condescend to give some explanation to the deluded. I am, Sir, your obedient servant,

Argus.

May 2nd.

To the Editor.—Is it true that Dr. Copland has *given up* his Dictionary, and that he intends to leave the work incomplete? It is right that the very numerous purchasers of the published parts of the work should be on the *qui vive* on this point, I hear. Yours respectfully,

A Subscriber.

HOPITAL DES ENFANS TROUVÉS, PARIS.

Hydrocephalus. — *Complete unfolding of the Cerebral Hemispheres. — Considerable Over-lapping of the Bones composing the Roof of the Skull, in a Child of six days old.*

On the 25th July, 1835, a child of the female sex, four days old, was brought to the *Enfans Trouvés*. The child was of middling stature and force; the limbs well developed; fat; slight icterus; considerable œdematous endurcissement of the cellular tissue of the extremities and back; sound obscure at the posterior part of both sides of the chest; numerous spots of purpura on the face. The cranium is small, and the upper part is marked by prominent osseous lines, resulting from the overlapping of the bones. There is no trace of fontanelles. The face projects a good deal, and the eyes are more prominent than is natural; the forehead is depressed. During the child's stay at the hospital we did not remark anything more than the symptoms ordinarily observed in children affected with hardening of the cellular tissue, and a double pneumony. The motions were slow, the cry feeble and imperfect; the child made no efforts at sucking when the finger was placed in its mouth. During the six days she survived, a little sugar and water was the only nourishment taken. After death, which took place on the 27th, we found a double pneumonia, passed to the second degree, occupying all the posterior part of both lungs.

The integuments of the skull having been removed, this latter cavity was divided from before backwards, including the brain, which was found in the following condition:

Both cerebral hemispheres, covered by their membranes, to which they adhered closely, were reduced to a simple layer, which, in some points, was separated a little from the bone; it was not distended so much as it could be, but formed a good number of folds. The plate of cerebral substance attached to it was very firm, yellow, and coriaceous. The layer now described was extremely thin, not often exceeding a quarter of a line in thickness, sometimes not one-sixth. The right hemisphere was formed simply by its enveloping membranes, to which a few streaks of cerebral substance adhered. The lateral ventricles were excessively developed, and communicated freely with one another by an oval opening which occupied the place of the septum lucidum; nothing remains of this latter part but a few medullary chords. We also remarked several small cavities, formed by the separation of two plates of the cerebral substance; they are quite smooth, and seem formed some time before death. One of these, more considerable than the others, is situate at the outer side of the left lateral ventricle, with which it communicates by an opening about one line in diameter. These accessory cavities, and the lateral ventricles themselves, contain several pillars, formed by the cerebral substance, and arranged something like the carnæ columnæ of the heart. The optic thalami and corpora striata are distinct, but reduced to a very small volume. The cavity of the middle ventricle is nearly normal, the communications with the lateral ventricles alone being dilated. The fornix and corpus callosum exist in their whole extent; but the latter is very considerably reduced in depth; the raphé can be distinguished on its upper surface.

The bone of the brain presented nothing remarkable; all the nerves existed, but they seemed smaller than in the normal state. The bones of the cranium, instead of being separated near the sutures, and thinned, as is usually the case in chronic hydrocephalus, appeared to be thickened, more hard and ossified than they ought to have been for the

period of life. The bones overlapped one another, even at the fontanelles, which were thus completely closed; hence the volume of the cranium was rather diminished than enlarged, as commonly takes place in most examples of the disease now before us. The account of this case was presented to the *Anatomical Society* of Paris, by M. Padieu, interne.

NORTH-LONDON HOSPITAL.

HYPERTROPHY OF THE HEART.—ABNORMAL SOUNDS OF THE HEART.

Elizabeth Davis, aged 33, was admitted, Feb. 2, under the care of Dr. Elliotson. She describes herself as a housemaid. She has been out of health for some time past, and has three times been the subject of acute pain, of a stabbing character (apparently resembling pericarditis), at intervals of several years; the last happened about seven years ago. She is also, from time to time, affected with palpitation of the heart, increased by exertion, or going upstairs; always lies less easily on the left than the right side. On Friday last she was attacked with pain in the region of the heart, darting through to the back. She now lies in a very feeble state; the action of the heart is rapid, 170; impulse irregular, both in force and frequency; frequently very strong, and attended with a hollow loud dry sound, as though something was striking on a drum. Sometimes there was a sound as if two substances were striking together; sometimes there was a second sound, and sometimes a distinct bellows sound was detected. Her tongue is foul, and she vomits all food; the surface is cool, the feet very cold; catamenia regular; no cough; no œdema of the lower extremities. Previous to her admission she had been bled, and a blister applied to the left side. She had also been freely purged, and the following draught given to her every eight hours:—Tincture of digitalis, ten minims; tincture of squills, fifteen minims; one drachm of spirits of nitrous ether; half a drachm of the acetate of potass, and an ounce and a half of peppermint water. As there was so much sickness, one minim of creosote was given in mucilage with each dose of the medicine; the creosote was increased on the next day to two minims, and a mustard poultice was applied to the epigastrium.

5. The pain in the region of the heart quite gone; the palpitation and abnormal sound still continue; flow of urine increased.

6. The jugular veins are observed to be much distended, but they do not pulsate. The tincture of digitalis was increased to twenty minims.

8. From some reason or other, phlebitis came on in the legs, to relieve which leeches were applied. She continued so ill, that she was ordered on the 11th three grains of blue pill every three hours. The legs became, in every way, better on the 12th, but she became troubled with a cough, and expectorated freely a brownish mucus.

13. The pill was given in six hours.

16. The pulsation of the heart not quite so violent; the pulse at the wrist, however, still continued extremely irregular, and the drum sound at her heart still was present, the same as at her admission. Dr. Elliotson remarked, that he was not perfectly satisfied with respect to the palpitation of the heart in this case, and as it continued, with scarcely any decrease of violence, on the left side of the heart, he considered there must be hypertrophy of some part of it. The patient, however, felt better, and wished to go away: she was discharged relieved on the 5th of April, but presented herself again for re-admission on the 16th of the same month, as she had caught cold from crossing the leads at the top of the house, after being in a warm room; she soon began to experience a dull pain in the chest, great difficulty of breathing, cough, with a copious yellow expectoration, pain in the head, and feverishness. Three days after, she was admitted with the above symptoms. Crepitant rattle is heard in great intensity at the back of the chest; mucous rattle is also present. The heart's action is very violent, and the same abnormal sounds are present as detailed above; the pulse very rapid, irregular in force and frequency, small and feeble. Respiration very laboured; extremities cold, nausea and vomiting; no tenderness of the epigastrium; no œdema of the feet; is drowsy. Bled to ten ounces, when she fainted. Five grains of calomel and two of opium were given her every six hours, and a blister applied to the chest.

17. Slightly relieved; mouth not sore; to take five grains of calomel every second hour.

18. Sick after the pills; mouth getting a little sore. Two minims of creosote to be given just before each pill.

19. Sickness gone; breathing rather more easy; mouth quite under the influence of the mercury. She died on the 21st.

Autopsy.—Heart larger than natural, the right cavities distended with blood; cavity of the left ventricle a little dilated; walls not increased in thickness or firmness; mitral valve exceedingly diseased, anterior half adhered to a considerable extent to the posterior one; deposition of fibro-cartilaginous matter between the layers of the valves; no ossification. Many of the chordæ tendinæ had disappeared, and others were much shortened. The place of these chordæ tendinæ was supplied by a much smaller number, one or two chiefly of car-

tilaginous bands, shorter than the chordæ, going from the apex of the valve and tying it down to the substance of the heart close by. Thus the communication between the auricle and ventricle must have been permanently patent, about large enough to admit the point of the index-finger. Left auricle dilated and hypertrophied, especially the auricula. White coagulated fibrine, of unusual firmness, was found in most of the cardiac cavities. The right ventricle a little thickened towards its basis. Tricuspid valves similarly diseased to the mitral, but in rather an earlier stage; the right auricle much dilated; auricula dilated and thickened; pulmonary sigmoid valves healthy; aortic sigmoid valves thickened by the same kind of deposit as the mitral. There was a little effusion into the pericardium. Isolated red spots (like ecchymosis) of bloodvesels under the lining membrane near the margin of the mitral and tricuspid valves.

Lungs presented a peculiar appearance; externally, a large part looked pale. On cutting into them, a great portion seemed quite white and bloodless, and contained little fluid; more escaping on pressure. The white parts were intersected with bands of red, some quite hepatized; bronchial membrane very red, and covered with plenty of mucus; liver hard, and of a dark colour, containing a large quantity of bile.

ELECTION OF SURGEONS TO THE STRAND UNION.

This extensive "Union" was one of the first results of the incorporation of parishes now carrying on in the metropolis under the direction of the Poor-Law Commissioners. The "Strand Union" comprises within its bounds the two large parishes of St. Clement Danes and St. Paul's, Covent Garden; and as the number of sick-poor is enormous, the office of *surgeon* would necessarily entail upon a conscientious man an onerous load of duty. The decision of the guardians was in favour of electing *two* medical officers for the whole district, at the same time determining to retain, as parochial infirmaries, those of St. Clement Danes and St. Paul's, Covent Garden. The candidates for the vacant offices were numerous, and among them were the late surgeons to the parishes; but the system of "tender" was not resorted to in this election, which was held last week, when the appointments were conferred on the late officers, Mr. Cosgreave of St. Clements, and Mr. Brooke of Covent Garden. Both of these gentlemen will, we are satisfied, give general satisfaction in the respective portions of the Union confided to their care. Having had frequent opportunities of knowing how ably and diligently the infirmary and "out-door" practice of St. Clement Danes has been performed by Mr. Cosgreave, we may state that the rejection of that gentleman would have been a great injustice towards the sick poor of the Union.

A petition has been signed by all the physicians and surgeons of the hospital at Gloucester, together with the other medical men in the city, for an alteration in the medical clause of the Poor-Law Amendment Act. It is to be presented to the House of Commons by Captain Berkeley. One from the county will also be prepared.

The following advertisement, which appears in a Gloucester paper, exhibits a vast difference of tone from that assumed at the outset of their career, by the Boards of Guardians, under the authority of the Poor-Law Commissioners. The change is too obvious to escape notice, and on many accounts is worthy of remark:—

"A Vacancy in the Medical Department of the —— Union will shortly occur. The Guardians, assembled at their next meeting at Whitminster Inn, on Friday, the 6th day of May next, will therefore be ready to receive any application which may be made to them by any medical gentleman who may be desirous of filling that situation.

"Hawker and Fryer,
Clerks to the Board of Guardians.
"April 28, 1836."

Medico-Botanical Society.—The Anniversary Meeting of the Society will be held at the Royal Institution on Wednesday next, May 11, when the president, Earl Stanhope, will deliver an oration.

CORRESPONDENTS.

An Enemy to Quacks should transmit his name and address confidentially. Some *friend* to quacks might be anxious for the statement to appear in print, for the advantage of a puff in its contradiction. The *possibility* of such a scheme affords reason for caution.

Our correspondent at Pontypool must oblige us with his name, in confidence.

The notices of prizes at the medical schools are so numerous, that we can only insert them as advertisements.

The letters of *Mr. Robinson*, of Dudley, *Mr. C. Cowan* of Bath, *Dr. Wolff*, and *Mr. Rowe*, have been received.

Antihumbug (near Lynn) must favour us by authenticating his statements, confidentially.

The name of *Mr. Bevan* was not in the manuscript.